

# BOOK OF READINGS

## DRUG USE BY ADOLESCENTS:



IDENTIFICATION

ASSESSMENT

INTERVENTION

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**YOUTH AND DRUGS**

**DRUG USE BY ADOLESCENTS:  
IDENTIFICATION, ASSESSMENT  
AND INTERVENTION**

**Edited by**

**Helen M. Annis  
and  
Christine S. Davis**

**BOOK OF READINGS**

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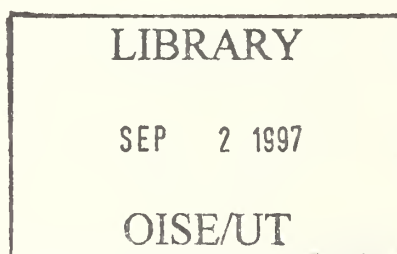
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## PREFACE

This book was developed as part of an initiative by the Addiction Research Foundation of Ontario to provide front-line professionals with an overview of current research findings and clinical practices in the field of youth and drugs. Many professionals — physicians, nurses, psychologists, social workers, police and correctional officers, clergy, teachers, school guidance counsellors and other youth workers - are in routine contact with youth who are beginning to experiment with or use drugs regularly. By bringing together review papers by leading researchers in the field of youth and drugs, this book is intended to provide front-line professionals with an overview of current findings in adolescent development, drug use, assessment and intervention strategies.

Chapters 1 and 2 address basic background issues and research findings in the areas of adolescent development and youth substance abuse. In Chapter 1 on Adolescent Development and Behavioral Health, Richard Jessor presents evidence linking health risk in adolescence (including risk of drug use) to personality, environmental and behavioral factors and suggests the relevance of these factors to the design of interventions to reduce risk and enhance health. Chapter 2 by Reginald Smart and Vivian Jansen on Youth Substance Abuse provides a review of the nature and extent of drug use in young people (age 9 to 19 ), the characteristics of users, and the physical, psychological, family and social problems that may result from such use.

Legal issues in the assessment and treatment of young people with alcohol and drug problems is explored in depth in Chapter 3 by Robert Solomon and Sydney Usprich. Areas covered include principles of consent to treatment, the concepts of confidentiality and privilege, a healthcare professional's disclosure, reporting and recordkeeping obligations, and finally the potential criminal liability concerns for professionals that may arise in the course of treating drug users.

Chapters 4, 5 and 6 provide overviews of identification and assessment methods with young drug users and intervention strategies including family counselling. In Chapter 4, Margo George and Harvey Skinner review critical issues in the assessment of adolescent drug use, and examine the evidence for two recently proposed comprehensive assessment models together with various clinically-derived guidelines for treatment-related decisions. It is noted that these are underdeveloped areas in need of research. The empirical literature on treatment of youth with problems of substance abuse is reviewed by Adrian Wilkinson and Garth Martin in Chapter 5. In addition to evaluating the evidence on the effectiveness of various treatment approaches and the predictors of outcome, other important issues are addressed in this chapter including factors the counsellor should consider in the choice of treatment goals and treatment approach with drug dependent youth. Finally, in Chapter 6 by William Quinn, Bruce Kuehl, Frank Thomas and Harvey Joanning, interventions are described that address an adolescent's drug abuse using the family as the unit of treatment. Treatment steps recommended in this approach are illustrated with vignettes from actual therapy transcripts of families in treatment.

We would like to acknowledge the contribution of many individuals to the preparation of this book. Of course, we are most indebted to the authors for the fine chapters they have contributed. We also extend our thanks to members of the Steering Committee established by the Addiction Research Foundation to oversee the production of educational materials for front-line professionals working with youth; these members are Peter Bohm, Dick Boudreau, Grant Lowery, Donald Morgan, James Rankin, Judi Stevenson, Elsbeth Tupker and Graham Turrall. Invaluable editorial, design and production assistance were received from Catherine Cragg, Marg Yeo, and Dennis Poff. Finally, we wish to thank the Addiction Research Foundation and the Education and Training Group of Canada's Drug Strategy, Health and Welfare Canada for contributing the support and resources needed to bring this project to publication.

Helen M. Annis  
Christine S. Davis

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# **CHAPTER 1: ADOLESCENT DEVELOPMENT AND BEHAVIORAL HEALTH**

**Richard Jessor**

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## INTRODUCTION

Unbroken in continuity and seamless as time, the life course has nevertheless been subject throughout history to differentiation and partitioning of one sort or another. The divisions have reflected literary fancy, biological regularities, arrangements of the social order, and even the phenomenology of subjective awareness. Whatever the number of stages or periods described, however, their nature has always been somewhat problematic and their boundaries ambiguous and uncertain. Adolescence, as a relatively new emergent in the history of ideas about developmental stages, exemplifies all the difficulties associated with attempts to segment the trajectory of lives. Dissatisfaction with it as a single stage, for example, continues to be expressed in proposals to differentiate it further into early and late adolescence or to create yet another life stage, youth, to lie between adolescence and adulthood.

It has become quite clear by now that no absolute or univocal criteria can be invoked to demarcate periods of the life course—including the adolescent period. The criteria employed usually stem from the discipline or the interest of the developmentalist: an interest in physical growth might direct attention to the calcification of the bony epiphyses, the onset of the menses, or the volume of the testicles; an interest in social growth might focus on the shift toward peer orientation, the initiation of dating, or the assumption

of certain role obligations; and a concern with organizing educational arrangements might give prominence to certain characteristics of the thought processes, especially the attainment of formal operational thinking. In short, the criteria that can be used to bracket the adolescent period will vary according to a number of considerations, including the population of young people being dealt with, the social and cultural setting in which they are located, the aim, purpose, or interest of the inquiry, and the time in history in which the inquiry takes place. Obviously, multiple and converging criteria are required for conviction that adolescence as a life stage has in fact been specified.

Despite such cavils about varying criteria and uncertain boundaries, it is apparent that adolescence is widely perceived in contemporary society as a period in the life span that is of key developmental significance. Accompanying this perception is a steadily growing awareness that the time of adolescence has special relevance for health. Not only is it distinctive in itself as a period of relatively high risk for compromising health, but, equally important, it is a developmental period that has long-range implications and reverberating consequences—both positive and negative—for health at later stages of the life span.

### 1.0 ADOLESCENCE IN THE LIFE SPAN

The adolescent period has experienced a major renewal of interest over the last decade or two, and there has been a burgeoning of research focused on it. Some of the impetus for greater attention to adolescence seems to have come from societal concern about the new patterns of behavior, especially those involving drug use and sexual activity, that were embedded in the youth movement of the 1960s and 1970s and that constituted an unanticipated and disconcerting challenge to established norms. Some of the impetus derives from an entirely different quarter—the enhanced awareness within the developmental sciences that plasticity and change are not confined to the earliest years alone and that the course of subsequent development is not already set by the events of infancy and early childhood. Indeed, the emergence of the life span perspective in developmental psychology (Baltes,

Reese, & Lipsitt, 1980) and the elaboration of the life course emphasis in sociology (Elder, 1975; Riley, Johnson, & Foner, 1972) were based in large part on the premise that significant developmental change occurs throughout the entire life span. The characteristic pervasiveness and rapidity of change in adolescence has made that period an especially relevant stage for life span or life course research. Finally, recent years have seen the formulation of various theoretical positions (e.g., the problem-behavior theory of Jessor and Jessor, 1977) in which the adolescent period is allocated a pivotal role in the shaping of personality and behavior; this, too, has provided impetus for greater attention to adolescence.

As noted earlier, the absence of clear-cut boundaries around the adolescent period makes it difficult to segregate it from the stages that precede and follow

it. When chronological age is relied on to delimit adolescence, the range usually extends from a rough lower bound of 10 to 12 years old to a rough upper bound of 18 to 20 and even beyond. Although it is helpful in locating adolescence as a segment along the life trajectory, chronological age remains a very unsatisfactory criterion for several reasons. First, there is enormous interindividual variation in the relation of age to the various other criteria—biological, psychological, social, and institutional—that must be invoked to bracket the adolescent stage more precisely. Furthermore, there have been long-term, secular changes in the relationship of several of these other criteria to age: the increasingly earlier age of menarche; the earlier age of entry into the secondary school system; and the initiation of sexual activity at increasingly younger ages. Finally, the timing of appearance of the various indicators of adolescence is likely to be asynchronous for a given child; thus, the onset of puberty as an indicator may occur at an earlier age than other indicators, for example, before entrance into junior high or before the assumption of autonomy in personal decision making.

The difficulties that arise from relying on chronological age have led to efforts to focus on alternative criteria on which to map developmental age. Anatomical and physical criteria, such as those used in Tanner staging, can be helpful in specifying a biological age, but children equated in those terms will vary enormously, not only in chronological age, but also on a large number of psychosocial and educational indicators whose convergence is required to implicate adolescence as a full-fledged stage. An additional limitation of reliance on any sort of biological age notion is that there are really no biological criteria that can be used to denote the upper bound of adolescence in a way that parallels their use in establishing the lower bound. Social norms and institutional regularities need to be invoked for that purpose—for example, completion of secondary schooling; entry into the full-time work force; attaining an age that is legally defined as adult, such as the age to vote or drink; living in a committed relationship with a partner; or deciding to start a family. These indicators reflect a social rather than biological definition of the end of adolescence or the beginning of young adulthood.

There are two further problems in dealing with adolescence as a single, delimited life stage. One

of these is that adolescence entails a long period of time, an age range that covers at its conclusion nearly half the life span to that point. Over such an extended period of time, the events, experiences, and processes that characterize the earlier portion of adolescence are almost necessarily different from those that characterize the later portion. It is this fact that has prompted proposals to differentiate adolescence into more than a single stage in an effort to capture better the developmental variation that it encompasses. Given the sheer length of the adolescent period and the growth that takes place over those years, accounting for development, transition, and change within adolescence remains as much of a challenge as accounting for development into and out of that period.

Another problem in considering adolescence as a delimited life stage lies in the abundant evidence for continuity rather than discontinuity between adolescence and the stages that precede and follow it. Continuity on the antecedent side has been demonstrated in Kellam's work, for one example: classroom shyness and aggressiveness among first-grade black children was linked to their involvement with drugs a decade later during adolescence (Kellam, Brown, & Fleming, 1982). Continuity on the consequent side has been demonstrated in our own work in the Young Adult Follow-Up Study (Jessor & Jessor, *in press*), which provides evidence of how adolescent personality, social, and behavioral attributes predict variation in those same domains later in young adulthood. Such continuity between life stages argues against any sharp separation and disjunction of developmental stages, including the stage of adolescence.

Adolescence is best treated, therefore, as a stage that is internally heterogeneous and only roughly delimited, with the criteria of its onset—especially pubertal change—being more consensual than the criteria for its termination. For its full specification as a life stage, multiple and diverse criteria are required. In the final analysis, adolescence can be seen as a biologically marked, socially organized, and personally defined time in the life span. Encompassing nearly all the teenage years, and certainly the years in junior and senior high school, adolescence serves as a bridging period between childhood and young adulthood, and it functions as something of a crucible for the shaping of later life.

## 2.0 ADOLESCENCE AND CHANGE

The hallmark of the adolescent years is change. Extending from the transitions that are organized around the passage out of childhood to those that are concerned with the entry into adulthood, change tends to be pervasive across a wide variety of domains and to take place rapidly relative to its rate in nearly all other life stages. Beyond the more obvious changes in physical size and shape associated with the adolescent growth spurt and the onset of puberty, there are social and psychological changes that are equally transformative in magnitude. Some of these are rather direct reverberations and reflections of the physical changes—for example, elaboration of a new body image, attainment of greater athletic skill, or arrival at a sexually attractive appearance; and some are consequences of entry into new socially defined roles—exposure to new models and opportunities and the exploration of new self-definition and social identity occasioned by the social organization of adolescent life itself.

The developmental changes that are characteristic during adolescence can be approached in different ways. The focus can be on the major directions of overall growth or, alternatively, it can be on the acquisition of specific behaviors or the assumption of specific roles. The former approach has been exemplified by White's (1975) attempt to codify the main developmental trends he discerned in his case studies of late adolescence and early adulthood: the stabilizing of ego identity; the freeing of personal relationships; the deepening of interests; the humanizing of values; and the expansion of caring. Without having to assume that such trends are developmental invariants over history and across societies, we can still appreciate them as illuminating some familiar directions of adolescent psychosocial growth.

In a somewhat similar vein, Havighurst (1972) has proposed the concept of "developmental task." He lists a number of tasks or objectives the socially organized pursuit of which tends to structure change and transition in the adolescent period. These include such objectives as establishing autonomy and separation from family, completing one's education, choosing an occupation, establishing a sense of self, and developing a personal value system. Erikson (1963) has also pointed out several trends that are

central to the adolescent stage, including the coming to terms with physical intimacy and the establishment of identity. Finally, our own work suggests additional directions of developmental growth—for example, the trend toward nonconventionality during adolescence and the opposite trend toward greater conventionality and conformity during young adulthood (Jessor, 1983b). Our work also suggests other developmental tasks that nearly all contemporary American adolescents are now having to deal with, such as coming to terms with the use of alcohol and other drugs (Jessor, 1983a).

When change at a more specific level is considered, the emphasis shifts to those key behaviors and nodal experiences that occur for the first time in adolescence—starting to drink or to use other drugs, beginning to work, moving away from home, becoming a nonvirgin—specific events that can have far-reaching effects on the young persons involved and on how they see themselves and come to be seen by others. A focus on specific behavioral changes calls attention to the major role that peers play in adolescence as models and as sources of information and reinforcement.

These comments about change during the adolescent stage in the life course are meant to serve as general background for the elaboration of theoretical issues and findings more closely related to our concern with behavioral health. Before concluding this section, it is worth bringing together several implications for health that seem to be inherent in the adolescent life stage.

First, it is apparent that adolescence is a period in which a variety of behaviors relevant to health are initially learned and tried out — both those that are potentially health-compromising, such as drug use or precocious sexual activity, and those that are likely to be health-enhancing, such as regular schedules of exercise or limiting the intake of calories in the diet. Second, many of the psychosocial attributes that influence and regulate the occurrence of health-related behaviors — values, beliefs, attitudes, motivations, personal controls, self-concept, general lifestyle — are also acquired or consolidated during adolescence. These first two points emphasize the key significance of adolescence as a pivotal time for health-related learning and



socialization. Third, the changing environment of adolescence has its own implications for health in several important ways. Peers come to play a greater role at this stage relative to the role of parents or other adults, thus increasing the likelihood of nonconventional and health-compromising behavior; there is greater access at this stage to potentially health-compromising materials—drugs, alcohol, automobiles, and motorcycles—and to opportunities to use them; and the environment of adolescence is itself changing and developing, which results in major shifts in norms, in prevalence of behavior models, and even in legislative regulations, all of which can create uncertainty about appropriate behavior and can impose new demands for adaptation. Fourth, the sheer pervasiveness and rapidity of the personal and social changes that take place during adolescence may be a source of adaptation pressure—especially if multiple changes are under way simultaneously—and may require coping with feelings of inadequacy and expectations of failure.

Fifth, the asynchrony of changes during adolescence is also likely to be stressful and problematic for health—for example, the asynchrony between the attainment of reproductive maturity and sexual interest, on the one hand, and societal relaxation of its norms and controls proscribing sexual activity, on the other.

The organization of adolescence around the accomplishment of temporally ordered developmental tasks and the key role that adolescence appears to play in the learning of health-relevant behaviors and orientations suggest one more implication for health. Adolescence may well be a critical period for a particularly significant health-promoting intervention, one involving the societal definition of a new developmental task for all adolescents to master—namely, the assumption and management of personal responsibility for their own health and social responsibility for the health of others.

### 3.0 ADOLESCENCE AS A RELATIVELY HIGH-RISK STAGE OF LIFE

Although it may seem to be obvious, the concept of health risk, in adolescence as elsewhere, is complex. Its employment requires the articulation of a number of different dimensions and qualifications. The prior concept of health, itself problematic, also remains refractory to any simple specification, whether it be the absence of disease on the physical level, the sense of competence and self-actualization at the psychological level, the minimal involvement in non-normative activities at the behavioral level, or the successful enactment of role requirements at the social level. The complexity of the health risk notion can readily be seen in the elaboration of some of the dimensions along which it varies.

Health risk in adolescence can refer to risk that is immediately consequential within adolescence (e.g., the risk from driving after consuming alcoholic beverages); to risk that has consequences for the postadolescent period—that is, for adulthood and later life (e.g., the risk from obesity, or from a diet high in saturated fats); or to risks that include both present and remote consequences (e.g., the risk from becoming pregnant). It can refer to risk deriving from behavior (e.g., from cigarette smoking or from not using seat belts); to risk deriving from personality characteristics (e.g., risk from the sense of powerlessness or from having a strong need for

independence and rebelliousness); to risk related to aspects of the environment (e.g., risk from access to automobiles, from exposure to peer models for drinking, or from opportunities for sex); or to the interactions of all of these kinds of risks. Health risk can refer to risks that are relatively universal and invariant in their consequences for health (e.g., the risk from contracting a sexually transmitted disease or from having adolescent hypertension) or to variable risks that depend for their consequences on the presence of certain situational factors (e.g., the risk from using marijuana just before driving), on gender (e.g., the risk from heavy drinking when pregnant), on body size and weight (e.g., the risk from a high rate of alcohol intake), or on age (e.g., the risk from insufficient hours of sleep in early adolescence). Finally, health risk can also refer to a particular threshold level of intensity of involvement with a behavior or activity; lesser involvement in that behavior need not be risky and, in some instances, may even be health-enhancing (e.g., the risk from overeating, whereas eating lesser amounts of food is actually health-enhancing; or the risk from drinking alcohol, whereas intake of moderate amounts may be health-protective, while both abstinence and heavier drinking may be health-compromising).

When used to characterize an individual's life as a whole, the concept of health risk should reflect the balance that obtains between the health-compromising and the health-enhancing activities in which the person engages. Thus, the risk to health of engaging in health-compromising behaviors should probably be seen as variable; its magnitude will often depend on the extent, the variety, and the intensity of the health-enhancing behavior engaged in by the adolescent at the same time.

In documenting that adolescence is, indeed, a relatively high-risk stage of life for health, it would be entirely appropriate to consider such distal and macro health risks for adolescents as the impending possibility of nuclear devastation or the malignant consequences of poverty and unemployment. My focus here, however, will remain more proximal. I will refer briefly to a few of the major risks that characterize this particular stage of the life span and that can be consequential for the approximately 40 million adolescents in the American population.

It turns out that the primary causes of death and disability at this life stage are behavioral in origin. Most sobering is the fact that some form of violence—traffic accidents, suicides, and homicides—constitutes the leading cause of death among adolescents and youth in the 15 to 24 age range (NCHS, 1982). From 1950 to 1979, the number of deaths per 100,000 from motor vehicle accidents in this age group rose from about 34 to about 47. For white males between age 15 and 24, automobile accidents showed a death rate of 77 per 100,000, accounting for more than 40% of the deaths among this segment of the population. Such figures are even more compelling when we consider that they refer only to mortality and that the prevalence of motor vehicle-related morbidity and disability still has to be taken into account. Furthermore, in any appraisal of the risk associated with accidents, especially motor vehicle accidents, it is essential to recognize the important role played by alcohol and drug use—other key adolescent risk behaviors. Suicide, the third leading cause of death for young white people and fourth for young black people in this age group, implicates a whole other set of risk factors—the psychosocial processes of stress, depression, and coping failure that may surround the developmental tasks confronting young people.

Exposure to and involvement with alcohol, marijuana, and other drugs can be considered another facet of health risk during the adolescent period, with potential consequences for later stages of the life course as well. The fact is that some involvement with alcohol, tobacco, and marijuana is now statistically normative by late adolescence in American society, with 9 out of 10 high school seniors having tried alcohol, 7 out of 10 having tried smoking, and 6 out of 10 having used marijuana.

The most widely used drug, of course, is alcohol, with 71% of a national sample of graduating high school seniors—the class of 1981—reporting use in the preceding month and 6% reporting daily use during that same period (Johnston, Bachman, & O'Malley, 1982). Of considerably more health risk concern than the frequency of use, however, is the evidence about quantity of use per drinking occasion. Johnston et al.'s (1982) same Monitoring the Future report on the class of 1981 indicates that fully 41% of the 17,500 respondents had consumed five or more drinks on at least one occasion during the preceding 2-week interval (an increase, incidentally, from the 37% figure reported by the class of 1975). The consumption of five or more drinks at a single occasion is a level of intake that often leads to drunkenness, loss of control, deficit in perceptual-motor coordination, and accident proneness, the mortality and morbidity potential of which was noted earlier. In addition to the prevalence of such heavy use of alcohol in adolescence, its risk is probably compounded by the fact that most adolescents have their initial experience with alcohol before reaching tenth grade—that is, before age 15. Analyses of the data from another national sample study, this one involving nearly 13,000 junior and senior high school students in 1974 (Rachal, Williams, Brehm, Cavanaugh, Moore, & Eckerman, 1975), found that nearly a third of the adolescents in that sample who drank could be classified as problem drinkers, based on the frequency of reported drunkenness and the negative social and personal consequences associated with their use of alcohol (Donovan & Jessor, 1978).

With respect to marijuana, the most widely used illicit drug among adolescents, 32% of the class of 1981 reported some use in the preceding month, and 7% reported daily use in that period; the latter figure is still substantial, even though reported daily use has been declining from its peak of 11% in the class



of 1978. Of particular interest from a health risk perspective is the evidence for significantly earlier onset of marijuana use over the last seven annual measurements made by the Monitoring the Future project. Using retrospective reports by the graduating seniors regarding the school grade in which they first used marijuana, Johnston et al. (1982) show a significant increase in earliness of onset; for the class of 1975, only 17% reported marijuana use prior to tenth grade, whereas for the class of 1981, that percentage had doubled, with 34% reporting some use before tenth grade. When experience with any illicit drug is considered, the data show that 37% of the class of 1975 had used some illicit drug prior to tenth grade, whereas the comparable figure for the class of 1981 was 51%, fully half of the more recent graduating seniors having already had experience with an illicit drug by about the age of 15. The association of marijuana use with traffic crashes has been increasingly noted, as has the tendency to combine marijuana use with alcohol use, both facts pointing to further aspects of the risk potential of marijuana use.

The health risk associated with cigarette smoking is probably best established in relation to cancer and cardiovascular disease, issues that are of greater concern for later stages in the life span than for adolescence. It is in adolescence, however, that initiation to smoking generally takes place, and once there is a commitment to it in adolescence, smoking turns out to be an exceedingly difficult behavior pattern to abandon (however, for a very provocative report about voluntary cessation, see Schachter, 1982). Referring again to the most recent Monitoring the Future report, we find that, in the class of 1981, 20% have smoked one or more cigarettes per day in the preceding month and 13.5% have smoked half a pack or more per day over that same period. In terms of time of onset, nearly two-thirds of those who ever smoked on a regular daily basis began smoking by ninth grade or earlier. Although the data from this project indicate that daily use of half a pack of cigarettes or more declined from 19.4% to 13.5% between 1977 and 1981, the encouragement to be taken from that trend should be mitigated by the fact that the 1981 figure remains substantial and by our awareness of the tenacity of the smoking habit once it is established.

Sexuality is another behaviorally mediated area of potential health risk for adolescents—risk deriving

largely from the unintended and often unanticipated consequences of becoming sexually active, primarily pregnancy and contracting a sexually transmitted disease. Recent information about sexual activity among teenagers residing in metropolitan areas is available from a 1979 national survey (Zelnik & Kantner, 1980). Among women aged 15 to 19 who have never married, 46% reported having had intercourse; the comparable figure for a 1976 survey was 39%, and for a 1971 survey it was 28%. The mean age of first intercourse remained stable between 1976 and 1979 at 16.2 years. Chilman's (1978) extensive review of the literature on adolescent sexuality indicates that the major increase in incidence of sexual intercourse among teenagers has occurred among females, making the prevalence of adolescent nonvirginity much more similar for both sexes in recent years than it ever was before.

In the Zelnik and Kantner (1980) survey, over 25% of the sexually active women aged 15 to 19 reported never using contraception. Among all the sexually active women in this age range, the proportion who became pregnant rose from about 28% in 1971 to 30% in 1976 and to 32.5% in 1979. With regard to the total population of women aged 15 to 19, the 1979 data indicate that over 16% of them became pregnant, with an increasing rate of pregnancy at the younger adolescent ages. Pregnancy implicates health risk related to both abortion and child bearing and, of course, to the long-term consequences of adolescent motherhood. On the latter issue, Hardy's (1982) longitudinal studies indicate: "Adolescent mothers experienced high risk of family instability, low educational attainment, inadequate work experience, lower income, greater welfare dependency, and higher fertility than older women" (p. 263). With regard to the other major area of risk associated with sexual activity, 75% of those who have a sexually transmitted disease fall into the 15 to 24 age range, and the rate of rise in incidence of venereal disease, particularly gonorrhea, is highest in the adolescent age range.

Other areas of health-compromising behavior among adolescents involve the potential risk for cardiovascular disease in later life. Among the behaviorally mediated risk factors that have been implicated—aside from smoking—are obesity or overweight; dietary consumption of saturated fat, salt, and sugar; lack of regular aerobic exercise;

stress; and certain coping styles referred to as Type A behavior. Although such behaviors are widely prevalent in adolescence, considerable research is still needed to establish just how characteristic they are and whether their initiation and consolidation take place in adolescence or earlier in childhood.

The data cited thus far are intended to make a case for adolescence as a relatively high-risk life stage for health. The risk areas selected for mention are illustrative rather than exhaustive, with the emphasis placed on behaviors that are usually initiated in adolescence and are seen as central to the process of development during that period. Recent trends in several of the behaviors mentioned portend an exacerbation of their risk potential. One trend is the sheer increase in prevalence of potentially health-compromising behavior (e.g., driving after heavy alcohol use); another trend is toward earlier onset or a younger average age of initiation of such behaviors (e.g., marijuana use); and a third trend is the growing homogenization of the sexes, with

young women showing an increased prevalence of experience (e.g., in sexual intercourse and especially in cigarette smoking) and thereby "catching up" with the rates for young men. Each of these trends implies greater future health risk for the adolescent age period.

A real lacuna in evaluating overall health risk in adolescence is, of course, the lack of information about health-enhancing behaviors, behaviors that may serve to balance the negative consequences of at least some of the health-compromising behaviors so widely prevalent at this stage. Data are needed concerning such behaviors as seat belt and helmet use, adequate hours of sleep, following a weight control regimen, engaging in regularly scheduled aerobic exercise, nutrition monitoring, stress minimization, cultivation of enduring life interests, and elaboration of a general sense of competence, if a more adequate appraisal of risk in adolescence is ultimately to be achieved.

#### 4.0 THE INTERRELATEDNESS OF HEALTH RISK BEHAVIORS IN ADOLESCENCE

A further consideration about the risk behaviors just reviewed warrants attention. A large body of research has shown that many of the behaviors are interrelated and tend to covary systematically. Indeed, the intraindividual linkages among them—their tendency to co-occur within the same adolescent—are such as to suggest that they may constitute a *syndrome*, an organized constellation of behavior, rather than being a collection of independent, discrete activities. Insofar as this is the case, it has important implications for understanding the origin and nature of such behavior as well as for planning intervention and change programs.

The kind of evidence that can be brought to bear in support of this generalization can be illustrated by using the example of adolescent drug use behavior. First, research on adolescent drug use shows that involvement with any drug, such as alcohol, is associated with a higher likelihood of involvement with other drugs, such as marijuana or tobacco. Analyses of the 1978 Research Triangle national survey data (Rachal, Guess, Hubbard, Maisto, Cavanaugh, Waddell, & Benrud, 1980) indicated that frequency of drunkenness was positively correlated with marijuana involvement ( $r > .60$ ) and cigarette smoking ( $r > .40$  for males and  $r > .30$

for females) among more than 5,000 senior high school youth (Jessor, Donovan, & Widmer, 1980). Second, the use of drugs is associated with a higher likelihood of involvement in other types of risk behavior, such as precocious sexual activity, aggression, and delinquency. Thus, in our longitudinal sample of high school youth (Jessor & Jessor, 1977), 61% of the marijuana users were sexually experienced—that is, nonvirgins—by the end of their senior year as compared to only 18% of the non-users. With respect to alcohol, 41% of those who drank were sexually experienced, as compared to only 4% of those who were still abstainers. These figures represent major differences in rates of involvement in other health-related behaviors, in this case precocious sexual activity—differences that are linked to involvement with drugs.

Third, the greater or the heavier the involvement with drugs, the greater the likelihood of involvement with other problem behaviors; thus, heavy marijuana users or problem drinkers have higher rates of nonvirginity than do lighter marijuana users or nonproblem drinkers. Fourth, it is clear that various health risk behaviors can be engaged in simultaneously. Thus, continuing with our drug use illustration, 29% of the senior high school students



in the 1978 Research Triangle survey reported that they sometimes used marijuana and alcohol together (Rachal et al., 1980). A fifth kind of evidence in favor of a risk-behavior syndrome is the negative relationship that obtains between various health-compromising behaviors, on the one hand, and what we have called conventional or conforming behaviors, on the other. In that same 1978 Research Triangle survey, marijuana use was negatively correlated with church attendance ( $r = -.29$  for females and  $r = -.24$  for males); the greater the involvement was with marijuana, the less was the involvement with church. Sixth, and finally, there is substantial evidence that the pattern of psychosocial correlates associated with a number of the different risk behaviors—both personality and social environmental correlates—is essentially the very same pattern. This similarity in psychosocial correlates has been shown to apply to alcohol use, marijuana use, cigarette smoking, and sexual intercourse experience for adolescents (Bachman, Johnston, & O'Malley, 1981; Jessor, Chase, & Donovan, 1980; Jessor, Costa, Jessor, & Donovan, 1983; Jessor, Donovan, & Widmer, 1980).

Interrelatedness among risk behaviors for adolescents has also been reported in research outside the United States. In a study of senior high school adolescents in Israel, significant relations were found between cigarette smoking, alcohol use, marijuana use, and sexual experience (Tamir, Wolff, & Epstein, 1982). Also, in a longitudinal study of Finnish adolescents, Pulkkinen (Note 1) reports a correlation of .64 between regular smoking and the use of alcohol at age 14.

The evidence cited thus far has dealt primarily with a subset of adolescent risk behaviors that can be termed problem behaviors (Jessor & Jessor, 1977), behaviors that depart from the regulatory norms of the adult society. A key question that has yet to be addressed systematically in research is the linkage between such behaviors and other health risk behaviors, such as insufficient sleep, lack of exercise, inadequate nutrition, or excess calorie intake—behaviors that, though not involving transgression of societal norms, may nevertheless be risk factors for health during adolescence or later. In short, what is important to establish empirically is how broadly the perimeter needs to be drawn in order to circumscribe the syndrome of risk behaviors among adolescents.

Research bearing on this issue is exceedingly limited. In a follow-up study of adults, Mechanic (1979) has shown significant negative correlations (about  $-.20$ ) between smoking and both engaging in physical exercise and using seat belts when driving. Within a senior high school sample of 15- and 18-year-olds, Hays, Stacy, and DiMatteo (Note 2) report a significant negative correlation between meal regularity (eating breakfast and not skipping other meals) and drug use and a significant positive correlation between meal regularity and greater hours of sleep for both men and women. Rimpela (Note 3, cited in Pulkkinen, Note 4) found smoking to be related to lack of physical activity, heavy use of sugar, and coffee drinking among Finnish youth. Although they are suggestive and intriguing, these studies only make clearer the need for systematic research into the degree to which the larger set of health risk behaviors tends to covary in adolescence.

The evidence in support of the syndromal nature of adolescent risk behavior is important to note for several reasons. First, it suggests that the various risk behaviors may already be linked in the social ecology of youth, with socially organized opportunities to learn and to practice them together. Second, it suggests that the different behaviors may be serving similar psychological functions and, despite their diverse topography, may have common social and personal meanings. Third, it raises a serious question about whether intervention and change efforts should remain focused on specific behaviors, as they generally are, or should be oriented, instead, toward the syndrome as a whole. Finally, it alerts us to the potential utility of the concept of lifestyle, a notion given wide currency in the health field. The key meaning of lifestyle pertains to an organized pattern of interrelated behaviors, and that is exactly what the evidence for a risk-behavior syndrome suggests is the case. It may be useful, therefore, to conceive of adolescence as a developmental period in which choices are being made among various alternative lifestyles rather than just among behaviors, and in which subsequent development involves the consolidation and integration of the health-related behaviors that the particular lifestyle happens to encompass. Such an emphasis on lifestyle choice is not at all alien to ideas about identity formation in adolescence, such as those elaborated by both White (1975) and Erikson (1963).



## 5.0 THE PSYCHOLOGICAL MEANINGS OF HEALTH RISK BEHAVIORS IN ADOLESCENCE

If the behaviors discussed here constitute risk factors for health and, in at least several instances, can elicit negative sanctions from society (e.g., for illicit drug use), criticism from parents and friends (e.g., for drunkenness or for precocious sexuality), and even self-rejection (e.g., for obesity or for excessive smoking), what accounts for their occurrence and their wide prevalence during adolescence? A comprehensive reply to such a query requires presentation of a social-psychological theory relevant to risk behavior, a task that will be postponed until the following section of this chapter. For present purposes, however, a beginning answer can come from an understanding of the important personal meanings, symbolic significance, and psychological functions that such behaviors can serve for adolescents. Rather than being arbitrary or fortuitous or reflecting some kind of youthful perversity, risk behaviors—like all learned behavior—are purposive, goal-directed, and capable of fulfilling multiple goals that are central to adolescent life. The goals these behaviors can attain and the meanings they may represent are not, of course, intrinsic to the behaviors but depend on larger processes of sociocultural definition and on an adolescent's unique learning and socialization experience.

A listing of some of the major functions, purposes, or goals of engaging in risk behavior can help clarify their likely importance to adolescents and can also illustrate the fact that such goals are not really different from those associated with other kinds of behavior. Engaging in certain risk behaviors in adolescence can serve the following functions:

1. An instrumental effort to attain goals that are blocked or seem otherwise unattainable. Thus, engaging in precocious sexual intercourse and becoming pregnant can be a way of attaining independence from parental control and regulation and taking personal control of one's life.
2. A means of expressing opposition to adult authority and the conventional society whose norms and values are not shared by the younger generation. Much of young people's drug use during the Vietnam era was a symbolic way of repudiating the war by engaging in precisely the behavior that the larger society was trying to proscribe.
3. A coping mechanism for dealing with anxiety, frustration, inadequacy, and failure or with the anticipation that failure is likely—whether in relation to school performance, the expectations of peers, or the high standards of parents. Heavy involvement with alcohol, for example, or even overeating, can be a way of dealing with poor academic achievement, with a sense of social rejection, or with the perception of parental disappointment.
4. A way of gaining admission to the peer group, of expressing solidarity with peers, or of demonstrating identification with the youth subculture. Cigarette smoking or the sharing of a "joint" are well-established and widely recognized marks of membership in the peer group.
5. A confirmation of important attributes of personal identity. Drinking and smoking, and driving after drinking, are readily learned as ways of showing that one is "macho," "cool," or "experienced" or has some other characteristic that is valued in adolescent culture.
6. A transition marker—that is, a symbol of having made a developmental transition, of having gone from a less mature to a more mature status, or of placing a claim on a more mature status. This function of risk behavior is an especially important one for adolescents. It derives from the fact that certain adolescent behaviors tend to be age-graded—that is, considered by society as appropriate only for those who have reached a certain age or age-related status. The use of alcohol is a good example, since it is proscribed for those below the legal age but permitted for those beyond it. When behaviors are age-graded, engaging in them earlier than is defined as appropriate can be a way of affirming maturity or of marking a developmental transition from adolescence to young adulthood.

This listing is admittedly a partial one; for example, a function frequently emphasized by young people is pleasure or fun, and it is clear that many of the risk behaviors can be seen as providing intrinsic enjoyment and excitement or as serving as a counterpoint to boredom and routine. The aim of the listing has been to show that the motivations for adolescent risk behavior are not only broad-ranging and salient but are, for the most part, the very same motivations that are involved in so much of the rest of adolescent behavior. Clearly, a great deal of additional information is needed about the psychological functions of health-compromising behaviors, especially those,

such as overeating or sedentariness, that do not involve transgression of societal norms or of age-graded appropriateness. An understanding of the functional nature of health-compromising behaviors not only helps explain their prevalence but is crucial for yet another reason. If we want to design intervention programs that make available to young people alternative or substitute behaviors that are less health-compromising, we will need to be sure that the alternatives proposed are capable of fulfilling the same or similar functions as the risk behaviors that they are intended to displace.

## 6.0 A THEORETICAL FRAMEWORK FOR HEALTH RISK BEHAVIORS IN ADOLESCENCE

The unsatisfactory state of theory in the field of adolescent health may well be the most serious obstacle to progress in understanding the nature of adolescent risk behavior and in devising effective approaches to reducing risk and enhancing adolescent health. Theoretical contributions such as Bandura's (1977) ideas about modeling and Fishbein and Ajzen's (1975) notions about attitudes and behavioral intentions have been significant and useful. Yet a more general and comprehensive theory — one that can encompass the broad range of health-related behaviors, can specify the psychosocial factors that instigate and sustain them, and can illuminate their role in the process of adolescent development — is still to be achieved. Because the issue of theory is deemed so crucial to progress in the health field, it is worth giving brief attention to a framework that, though obviously limited, has already demonstrated its relevance for at least some of the risk behaviors that have been discussed thus far.

The social-psychological framework is one we have called "problem-behavior theory" (Jessor & Jessor, 1977). It was initially formulated, almost 25 years ago, to guide a study of deviance—especially excessive alcohol use—in a tri-ethnic community in the southwestern United States (Jessor, Graves, Hanson, & Jessor, 1968). Over the years, it has been modified and extended to accommodate a cross-cultural study of drinking behavior among Italian and Italian-American youth (Jessor, Young, Young, & Tesi, 1970), to provide the theory for two national sample surveys of alcohol and drug use among junior and senior high school students (Donovan & Jessor, 1978, 1983; Jessor, Chase, & Donovan, 1980;

Jessor, Donovan, & Widmer, 1980), and, most fundamentally, to constitute the framework for a longitudinal study of problem behavior—alcohol use, problem drinking, drug use, sexual activity, aggression, delinquency—in cohorts of adolescents being followed from junior high school through young adulthood (Jessor & Jessor, 1977). The concepts and measures developed in problem-behavior theory have now been used in a large number of studies by other researchers in the United States and elsewhere (e.g., DiTecco & Schlegel, 1982) and have been applied to other risk behavior areas, such as cigarette smoking (e.g., Chassin, Presson, Bensenberg, Corty, Olshavsky, & Sherman, 1981; Rooney & Wright, 1982).

Although the theory has focused primarily on problem behaviors—behaviors that constitute transgressions of societal and/or legal norms and that tend to elicit some sort of social control response—its potential relevance to adolescent health risk behavior derives from several considerations. First, a number of the so-called problem behaviors that have been dealt with by the theory are the very same behaviors that have been referred to as health risk behaviors in this chapter—for example, alcohol use, marijuana use, precocious sexual intercourse, and driving after drinking. Thus, there is at least an area of overlap where the two domains of problem behavior and health risk behavior intersect. Second, some of the health risk behaviors that do not constitute transgressions of societal or legal norms, such as overeating or sedentariness, may nevertheless represent departures from more informal social norms, such as those of the peer group, or even from an individual's

personal norms about what is appropriate behavior in these areas. Insofar as departure from any norm may be involved, the formulations of problem-behavior theory would remain apposite. Third, problem-behavior theory has maintained the perspective that to account for variation in problem behavior is to account simultaneously for variation in conventional behavior. Thus, the theory has also attempted to explain—with the same set of concepts—behavior that conforms to the norms and expectations of the larger society and of its institutions, such as school and church involvement. In this sense, the theory may well have relevance not only for health risk behavior, but simultaneously for variation in health-enhancing behavior as well, at least to the extent that the latter can usefully be conceptualized as conventional. Finally, the potential relevance of problem-behavior theory derives from the fact that it includes a developmental formulation about the role of problem behavior (or health risk behavior) in the process of adolescent transition and change, a role already alluded to in the preceding section.

Problem-behavior theory rests on the social-psychological relationships that obtain within and between each of three major systems: the personality system, the perceived environment system, and the behavior system. Within each of the systems, the structures of the variables they encompass are interrelated and organized so as to generate a theoretical resultant, a dynamic state called *prone-ness*, that summarizes the likelihood of occurrence of problem behavior (or, in the present case, health risk behavior). Thus, it is theoretically possible to speak of personality proneness, environmental proneness, and behavioral proneness, and of their combination as psychosocial proneness toward problem behavior. The sovereign concept of psychosocial proneness is the key theoretical basis for predicting and explaining variations in youthful behavior.

The conceptual structure of problem-behavior theory is schematized in Figure 1.1. Since the rationale for each variable in the figure has been elaborated in detail in Jessor and Jessor (1977), only a brief description will be presented here; attention will be restricted to the three boxes of variables labeled A, B, and C: the personality system, the perceived environment system, and the behavior system, respectively. In the personality system, the

main characteristics of theoretical proneness to problem behavior include lower value on academic achievement, higher value on independence, greater value on independence relative to value on achievement, lower expectations for academic achievement, greater social criticism and alienation, lower self-esteem, orientation to an external locus of control, greater attitudinal tolerance of deviance, lesser religiosity, and more importance attached to positive functions of problem behavior relative to negative functions. The more these personality characteristics obtain for a person at a given time—that is, the more they constitute a coherent pattern or constellation—the more they theoretically convey personality proneness to problem behavior.

Within the perceived environment, an important distinction is drawn between regions or structures in terms of their proximal, versus distal, relation to behavior. Proximal variables (e.g., peer models for marijuana use) directly implicate a particular behavior, whereas distal variables (e.g., the degree of normative consensus between parents and peers) are more remote in the causal chain and therefore require theoretical linkage to behavior. Problem-behavior proneness in the distal structure of the perceived environment system consists of low parental support and controls, low peer controls, low compatibility between parent and peer expectations, and low parent influence relative to peer influence. In the proximal structure, problem-behavior proneness includes low parental disapproval of problem behavior and high friends models for, as well as high friends approval of, engaging in problem behavior.

The behavior system is differentiated into a problem-behavior structure and a conventional-behavior structure. The possibility that phenotypically very different problem behaviors (e.g., smoking marijuana or engaging in sexual intercourse) may serve the same social-psychological function (e.g., overt repudiation of conventional norms or expression of independence from parental control) is what underlies the notion of a structure of problem behavior. The conventional-behavior structure is concerned with behavior that is socially approved, normatively expected, and codified and institutionalized as appropriate for adolescents—for example, involvement with school work and with religious activities. Problem-behavior proneness in the behavior system directly reflects the degree of involvement in both the problem-behavior and the conventional-behavior



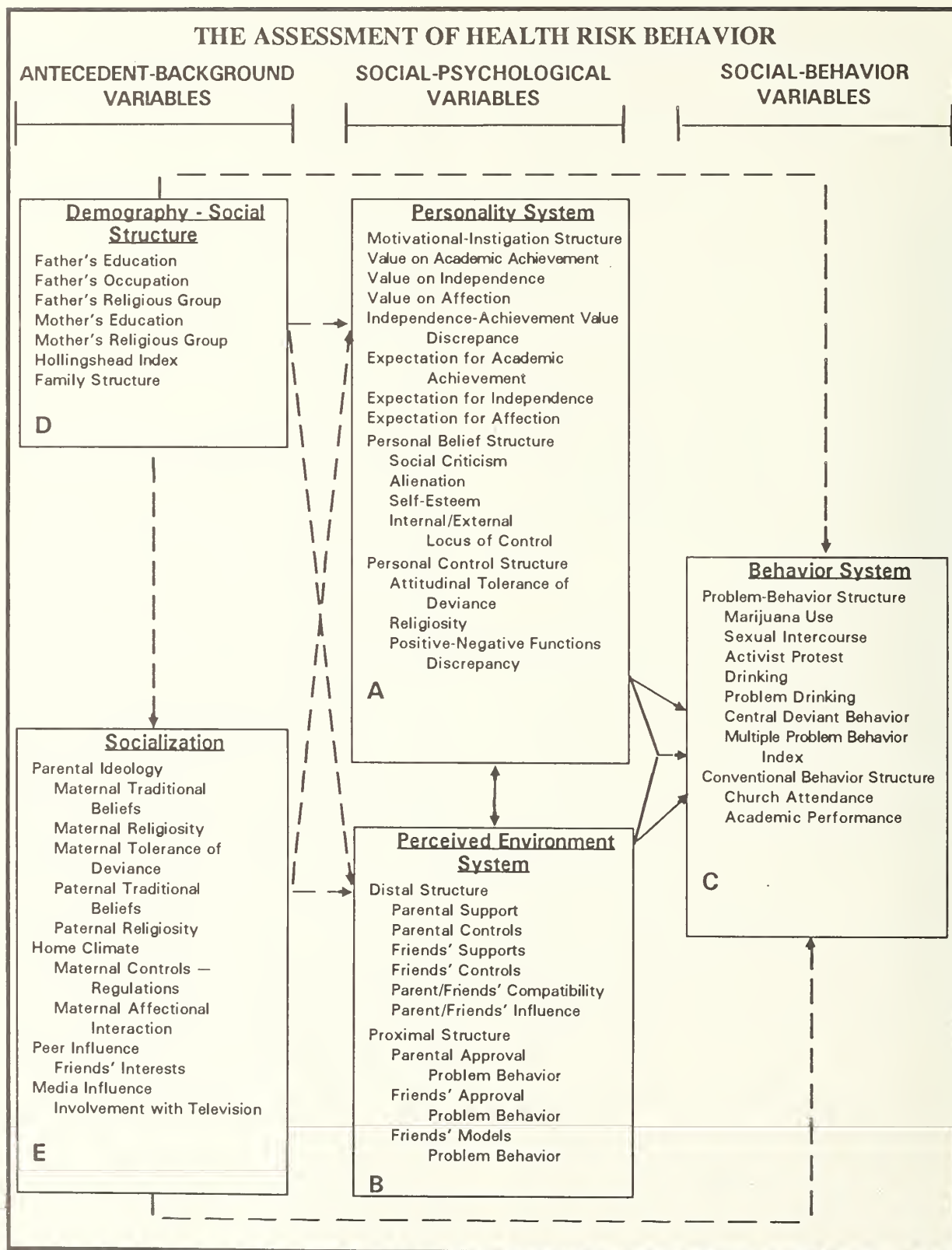


Fig. 1.1 *The Assessment of Health Risk Behavior.* (Reprinted with permission from R.Jessor, & S.L. Jessor. Problem behavior and psychosocial development: A longitudinal study of youth. New York, 1977.)

structures and also reflects the balance that obtains between those involvements.

The usefulness of problem-behavior theory has been demonstrated and repeatedly replicated in relation to a variety of adolescent risk behaviors and to a specially constructed composite multiple problem-behavior index. Multiple correlations of the variables in the three systems reach beyond .70 for male and female adolescents in relation to the composite index and to such separate risk behaviors as marijuana use and delinquent-type behavior. The multiple correlations are somewhat lower for problem drinking and for sexual intercourse experience. Thus, the theory has been able to account for between a third and a half of the variance in adoles-

cent problem behavior, providing reasonable evidence for its explanatory relevance.

Nevertheless, even accounting for half the variance in problem behavior means that half remains to be explained. It seems clear by now that other variables, not yet encompassed by the theory, will need to be brought to bear, and this is especially true if the theory is to be extended to deal with health risk behaviors more generally. Variables such as the value of health and fitness, the sense of competence and control in health-related activities, the repertoire of skills for health maintenance and risk avoidance—if measured well—might enlarge the scope of application of the theory as well as increasing its effectiveness.

## 7.0 PROBLEM-BEHAVIOR THEORY AND ADOLESCENT DEVELOPMENT

The discussion of problem-behavior theory to this point has emphasized its usefulness in accounting for variations in cross-sectional data on risk behavior. There are also logical implications in the theory for adolescent development and for behavior change over time. Much of what has been discussed as problem behavior is, of course, only a “problem” relative to age-graded norms; that is, the behavior may be permitted or even proscribed for those who are older while being proscribed only for those who are younger. Drinking, as one example, is a behavior that is proscribed for those under legal age but permitted and even institutionally encouraged for those who are beyond that age; sexual intercourse, a normatively acceptable behavior for adults and even for older adolescents, is a normative departure for a young adolescent, one that is likely to elicit social controls. Awareness among youth of the age-graded norms for such behaviors carries with it the knowledge that occupancy of a more mature status is characterized by engaging in those very behaviors. Thus, engaging in age-graded behaviors for the first time can serve to mark a transition in status from “less mature” to “more mature,” from “younger” to “older,” or from “adolescent” to “youth” or “adult.”

Many of the important transitions that mark the course of adolescent development do involve behaviors, such as precocious sexual intercourse, that depart from the regulatory age norms that define appropriate or expected behavior for that age or stage in life. Since behavior that departs from

regulatory norms is precisely what problem-behavior theory is meant to account for, this provides the rationale for systematic application of the theory to developmental change in adolescence. By mapping a new developmental concept, *transition proneness*, onto the already available theoretical concept of problem-behavior proneness, it becomes possible to use problem-behavior theory to specify the likelihood of occurrence of developmental change—change that takes place through engaging in age-graded, norm-departing, transition-marking behaviors such as beginning to drink, becoming sexually active, and the like.

The usefulness of the concept of transition proneness has been tested in relation to the onset of drinking (Jessor, Collins, & Jessor, 1972; Jessor & Jessor, 1975), the onset of marijuana use (Jessor, 1976), and the initiation of sexual intercourse (Jessor & Jessor, 1975; Jessor, Costa, Jessor, & Donovan, 1983) among samples of adolescents who had no prior experience with those behaviors. In each case, multivariate analyses have demonstrated that there is, indeed, a psychosocial pattern that obtains prior to engagement in the behavior and that is predictive of its later occurrence and of variation in the time of its subsequent onset. With regard to predicting the time of first intercourse, as one illustration, it was possible to establish that 142 boys and 204 girls in our junior high school cohorts were still virgins as of the 1970 testing year. Since these adolescents were followed into young adulthood, it was also possible to determine from the follow-up data just

when, in the subsequent time period between 1970 and 1979, initial sexual intercourse occurred and the transition to nonvirginity was made. The findings show that variation in time of onset of sexual intercourse across this 9-year interval was already signalled by the prior pattern of problem-behavior theory measures in 1970, when all the participants were still virgins. The multiple correlations ( $R = .55$  for males and  $R = .53$  for females) are significant and provide support for the predictive role of the concept of transition proneness.

Proneness toward transition, in this case to nonvirginity, was apparent on measures in each of the three systems of problem-behavior theory. Virgins who were to engage in sexual intercourse earlier, relative to those virgins whose onset took place later, were already higher in value on and expectation for independence, lower in value on and expectation for academic achievement, more socially critical in their beliefs about society, more tolerant of deviance, and lower in religiosity. They also perceived less compatibility between the expectations their parents held for them and those their friends held, less influence of their parents relative to that of their friends, and more social approval for and models of problem behavior, including sexual behavior. Finally, they were more involved in other (non-sex-related) problem behavior and less involved in conventional behavior, such as church attendance (Jessor, Costa, Jessor, & Donovan, 1983).

The importance of such findings does not lie only in the support they provide for problem-behavior theory and for its developmental implications. The findings also make clear that the onset of adolescent risk behaviors is neither arbitrary nor fortuitous but is, rather, a systematic outcome of characteristics of the adolescent and of the adolescent's perceived environment that precede onset. These characteristics represent a pattern of psychosocial risk

factors—a pattern we have termed transition proneness—conveying differential readiness to engage in health-compromising, problem, or risk behavior. The fact that such a pattern exists in advance of the onset of risk behaviors and is also predictive of onset makes it possible to think of early identification of adolescents at risk and of the feasibility of early intervention to promote health-enhancing alternatives.

The pattern of transition proneness that has emerged in our studies of the onset of problem behavior is very much the same in psychosocial content as the pattern of problem-behavior proneness we have found in our cross-sectional studies; the factors that are effective cross-sectionally are the same or similar to those that are effective longitudinally. The term that best captures the content of the dimension underlying psychosocial proneness is *conventionality-unconventionality*, and that dimension is equally appropriate for characterizing the three explanatory systems in problem-behavior theory. Indeed, it is possible to conceive of personality unconventionality (e.g., high value on independence, greater social criticism, more tolerance of deviance), perceived environment unconventionality (e.g., lower parent and friends controls, more approval, models, and opportunities for risk behaviors), and behavioral unconventionality (e.g., greater involvement in risk behavior and lesser involvement in conforming behavior). One of the main generalizations that can be drawn from the research on problem-behavior theory is that the conventionality-unconventionality dimension is central in accounting for variation in problem or risk behavior in adolescence. Achieving an understanding of the role that dimension plays in regulating adolescent health turns out to be an objective of primary importance to the field of behavioral health.

## 8.0 THE CONTINUITY OF HEALTH RISK BETWEEN ADOLESCENCE AND YOUNG ADULTHOOD

Achieving an understanding of the conventionality-unconventionality dimension in adolescence gains even greater importance when the linkage and continuity between adolescence and later life stages, especially young adulthood, are taken into consideration. Insofar as the characteristics referred to as psychosocial proneness to risk behavior in adolescence carry over to or are consequential for

postadolescence, it would mean that the degree of risk that obtains in adolescence needs to be multiplied or weighted to take that into account.

Two kinds of data are germane to the issue of continuity or carry-over of health risk from adolescence to young adulthood. One type of data involves the degree to which the components of psychosocial



prone to change in adolescence are in fact stable over time and do track into young adulthood. Since we were able to measure many of the variables in problem-behavior theory in both adolescence and young adulthood, it was possible to examine their stability directly by correlational analysis. Table 1.1, adapted from Jessor (1983b), presents the stability coefficients for a number of measures between 1972, when our participants were adolescents in the 10th, 11th, and 12th grades, and 1979, when they had reached young adulthood and were 23, 24, and 25 years old.

The data in Table 1.1 are raw Pearson correlations between the 1972 measure and the 1979 measure of each variable. Such correlations are obviously attenuated by the unreliability of the measures and are therefore conservative estimates of stability over time. Correcting for attenuation yields the correlations shown in parentheses for the multi-item scales whose internal reliability can be determined.

Although change has clearly taken place, it has been systematic, and the overriding impression to be gained from the data in the table is that there is a considerable degree of stability across time for nearly all of the measures drawn from problem-behavior theory. In nearly all cases, the correlations are statistically significant; in a number of instances, they are substantial in magnitude. When it is kept in mind that the time interval involved—7 years—is a very long one, that this portion of the life trajectory is considered to be one of major growth and transformation, that the environmental context of life during this period is itself likely to have changed markedly, and that the general social and historical background has also shifted, the stability represented by these correlations is even more impressive. It is worth emphasizing, also, that there is significant stability on measures from all three of the systems of problem-behavior theory—personality, the perceived environment, and behavior. These coefficients, taken together, would therefore seem to suggest some stability of individuality across this segment of the life span. They would also suggest it follows that there should

be continuity and carry-over of health risk between adolescence and young adulthood.

The second type of data that bears on this issue involves the degree to which psychosocial proneness in adolescence is predictive of engagement in risk behavior later in young adulthood. Again, the issue could be examined empirically because of the availability of psychosocial proneness measures in adolescence and of problem-behavior measures in young adulthood within our longitudinal follow-up study. For the example of problem drinking, the findings show that variation in psychosocial proneness in adolescence is modestly predictive of whether a participant is classified as a problem drinker or as a nonproblem drinker 7 years later, in young adulthood. The multiple correlations reach .53 for the males and .45 for the females, with both correlations being statistically significant at the .001 level. Problem drinker status in young adulthood was shown to be significantly linked to a number of problem-behavior theory variables in adolescence: lower value on academic achievement, higher value on independence relative to value on achievement, lower expectations for academic achievement, greater tolerance of deviance, lower religiosity, greater perceived approval for and models of problem behavior, greater actual involvement in problem behaviors such as use of marijuana, and less involvement with conventional behavior related to church and school (Donovan, Jessor, & Jessor, 1983). This pattern of psychosocial proneness once again reveals the underlying dimension of adolescent unconventionality, and the pattern is also predictive of other risk behaviors in young adulthood, such as involvement with smoking and with marijuana use.

Taken together, these two types of time-extended data make clear that there is continuity of adolescent health risk beyond the adolescent stage of life. Although evidence for continuity and carry-over is sobering in regard to the relatively enduring consequences of adolescent health risk, there is some consolation, at least, in the obvious corollary of such findings—that there should also be continuity and carry-over of health-enhancing dispositions and behaviors from adolescence to later life.

**Table 1.1: Stability Coefficients between 1972 and 1979 Psychosocial Measures, Young Adult Follow-up Study**

| Measure                               | High School Sample |                   |
|---------------------------------------|--------------------|-------------------|
|                                       | Males (N = 172)    | Females (N = 231) |
| <b>Personality System</b>             |                    |                   |
| Value on achievement                  | .08 (.12)          | .10* (.15)        |
| Value on independence                 | .22*** (.59)       | .23**** (.74)     |
| Value on affection                    | .25**** (.42)      | .22**** (.36)     |
| Expectation for achievement           | .24**** (.32)      | .12** (.15)       |
| Expectation for independence          | .22*** (.43)       | .10* (.29)        |
| Expectation for affection             | .29**** (.46)      | .22**** (.32)     |
| Self-esteem                           | .46**** (.66)      | .42**** (.60)     |
| Internal-external control — political | .32**** (.68)      | .25**** (.46)     |
| Internal-external control — general   | .15** (.38)        | .02 (.05)         |
| Social criticism                      | .24**** (.47)      | .29**** (.52)     |
| Alienation                            | .37**** (.57)      | .42**** (.62)     |
| Tolerance of deviance                 | .33**** (.41)      | .37**** (.47)     |
| Religiosity                           | .53**** (.61)      | .45**** (.51)     |
| <b>Perceived Environment System</b>   |                    |                   |
| Relative parent vs. peer influence    | .12* (.17)         | .23**** (.32)     |
| Parental approval of drug use         | .20***             | .27****           |
| Friends' approval of drug use         | .27****            | .21****           |
| Friends' models for drug use          | .28****            | .20****           |
| <b>Behavior System</b>                |                    |                   |
| Deviant behavior past year            | .30**** (.47)      | .29**** (.45)     |
| Church attendance past year           | .40****            | .42****           |

Table 1.1: Adapted from *"The stability of change: Psychosocial development from adolescence to young adulthood"* by R. Jessor, in D. Magnusson & V. Allen (Eds.), *Human development: An interactional perspective*, 1983.

Note: Correlations in parentheses have been corrected for attenuation for those multiple-item scales whose reliability can be ascertained.

\*  $p \leq .10$

\*\*  $p \leq .05$

\*\*\*  $p \leq .01$

\*\*\*\*  $p \leq .001$ , two-tailed test.



## 9.0 SOME IMPLICATIONS FOR HEALTH PROMOTION AND RISK REDUCTION IN ADOLESCENCE

It has been stressed throughout this chapter that adolescence is a life stage of relatively high risk for health and that in some areas, such as motor vehicle accidents, and for some groups, such as women, risk seems to be on the increase. Risk has been considered in terms not only of behavior but also of personality attributes and environmental supports. What singles out adolescence as a time of relatively high risk is that it is a key stage in which risk-related learning takes place—learning of new risk behaviors, of risk-prone personality dispositions, and of risk-enhancing opportunities in the environment. Recognition of this fact focuses attention on adolescence as a potentially critical period for the implementation of strategies to reduce health risk and to enhance health. In this final section, some considerations that may be relevant to those topics are briefly touched upon.

Although explanatory, analytic, or theoretically oriented research—research of the sort just reviewed—can be very useful for devising intervention strategies or for guiding change-oriented efforts, it should be kept in mind that it is not research that tells us how best to change things. Thus, what follows is imply an attempt to draw out some general and tentative implications from the perspective and content of the preceding discussion about adolescence and health.

The research showing that psychosocial proneness to risk behavior consists of a coherent pattern of personality, environmental, and behavioral attributes suggests one important implication — namely, that efforts at prevention, risk reduction, or health promotion should not be limited to a focus on behavior alone. Health risk clearly derives from personality proneness and environmental proneness, and attention to attributes in those two systems should logically influence the occurrence of health-related behavior, both health-compromising and health-enhancing. The point here is that intervention efforts might well assume a broader purview than has been characteristic of such efforts, whether the aim has been cessation of cigarette smoking or improvement of nutritional choices. Since any behavior is influenced by all three of the systems comprising problem-behavior theory, advantage should accrue to those programs that intervene simultaneously in all three systems.

The linkage of personality to health-related behavior warrants even further emphasis. Beyond our own focus on the relevance of the conventionality-unconventionality dimension, other attributes of personality have already received special attention in relation to health, such as the sense of personal autonomy or control (Seeman & Seeman, 1983; Wallston & Wallston, 1982). Others should merit special attention in the future, such as personal value on well-being and health or concept of self as competent and fit. Personality attributes of this sort, being central and general, carry relevance for a large variety of behavior choices and lifestyle alternatives; interventions that influence or shape them, therefore, should have broad and reverberating consequences for health as a whole.

Where the focus still needs to remain on behavior, as in cessation or inoculation programs, I have stressed here the necessity to understand the meanings, purposes, functions, or goals the behavior can represent or serve. Such understanding is crucial to any strategy that seeks to provide and reinforce alternative behaviors—lower in risk or even health-promoting—as substitutes for adolescent risk behaviors. Nonproblem or health-promoting behaviors are likely to be successful as substitutes or alternatives only if they serve functions similar to or more highly valued than those served by the original risk behaviors. Although that seems entirely feasible to accomplish in relation to many of the functions listed earlier for risk behavior—such as demonstrating peer group identity, affirming independence from adults, or coping with failure—certain of the functions — such as establishing a claim on a more mature status or marking the transition out of adolescence—may be more refractory to substitution. To the extent that health-promoting behaviors — e.g., taking personal responsibility for one's health or following a regular schedule of exercise—could become institutionalized as representing or symbolizing adult status, adolescent transition-marking behavior could become more benign than it is at present, when beginning to drink or engaging in sexual intercourse precociously are what seem to be required.

The research findings in support of the syndromal nature of adolescent problem behavior also have implications for health-related change efforts. With

a few exceptions, intervention programs with adolescents have tended to be behavior-specific. Prevention programs, especially those based in schools, are usually designed as separate units—for example, programs on drinking as a problem, or on drug use, or for sexually active adolescents—as if these behaviors occurred in isolation from one another. In fact, not only are they associated, but they often occur at the same occasion. Given this knowledge, intervention programs could consider enlarging their scope to accommodate multiple risk behaviors simultaneously and to deal with their common functions and the linkages between them. This implies interventions that, in addition to specific, behavior-relevant information, attitudes, and skills, would orient toward the lifestyle organization of the separate risk behaviors and, therefore, toward alternative lifestyle choice. The general emphasis of such programs would be on health-promoting lifestyles that are relatively incompatible with the syndrome of risk behavior.

Whatever the success of programs for substituting health-enhancing behaviors for health-compromising behaviors and healthy lifestyles for those that incorporate health risk, it seems obvious that most adolescents will sooner or later engage in some behaviors that constitute a risk to health. The prevalence figures for drinking, smoking, marijuana use, and sexual experience among contemporary American adolescents describe an epidemiologic context of almost inexorable insistence. The psychological goals involved are generally central to adolescent life; the representation of such behaviors in adult models and in the media enhances their attractiveness; and since they are, for the most part, age-graded behaviors, it is recognized that they ultimately will be permitted once a particular age or status has been reached. From this perspective, the rhetoric of prevention seems no longer to be entirely apposite. Efforts to promote or enhance health will have to adopt alternative strategies that have somewhat different objectives—objectives that assume that experimentation and exploration of risk behavior are going to occur as part of normal adolescent development.

One such alternative strategy might be called *minimization*. The objective of such a strategy would be not to prevent but to limit or confine involvement in risk behavior to exploration or to a controlled, moderate, or “responsible” level. Indeed, moderation and responsibility may well be the touchstone for minimizing risk to health, since, for most of the behaviors of concern, risk derives largely from heavy, frequent, and chronic involvement.

A second alternative strategy might be called *insulation*. Here the focus would be on insulating the exploration of risk behavior from serious, irreversible, or long-term negative consequences. Strategies that protect a drunken teenager from driving a car or that lessen the likelihood of pregnancy or venereal disease among sexually active adolescents are examples of insulating interventions.

A third alternative strategy to prevention, finally, would be *delay of onset*. The object of this strategy is postponement of the initiation of risk behavior. Postponement for even a year during adolescence can mean greater maturity and skill for dealing more responsibly with risk behavior. There is even some evidence to suggest that the later the onset, the less intense the involvement, at least for drinking, cigarette smoking, and marijuana use (Jessor, 1982).

It has been argued that adolescence is a pivotal stage in the life span for the development of health-related behavior. Not only is it a period of heightened health risk, but what happens in adolescence is consequential for health in later life. The major aim of this chapter has been to show that health risk in adolescence is a systematic outcome of personality, environmental, and behavioral factors that account for variation in prevalence and in time of onset. Such factors can also have relevance for the design of intervention efforts to reduce risk and to enhance health. If the discussion here has increased awareness of the potential contribution of theory to such efforts, then the result for the field of behavioral health should be—in the literal sense—salutary.

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## **CHAPTER 2: YOUTH SUBSTANCE ABUSE**

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The views expressed in this paper are those of the authors and do not necessarily reflect those of the Addiction Research Foundation.

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## INTRODUCTION

There are many ways to define drug abuse. Some define it as any use of drugs, while others argue that only use which is heavy, unusual or excessive constitutes abuse. Others insist that any drug use involving *illicit* drugs is abuse. For our purpose, drug abuse is any use of a psychoactive drug, including legal drugs, which causes problems for the user. We recognize that to some extent, problems are in the eye of the beholder. For example, while parents might see school dropout as a problem, the student may see it in a positive light. Similarly, many of the altered mental states produced by psychoactive drugs which psychiatrists or parents call problems are sought by users.

This review takes a very broad view of problems and includes difficulties ranging from physical problems, such as liver cirrhosis or pharmacological addiction; long-term psychological problems, such as dependence, craving, or memory disturbances; or short-term ones, such as altered mental states, intoxication, confusion, etc.; and a variety of social and family problems such as poor school performance, dropout, hostility, or aggression between family members and friends.

In this review, we examine the nature and extent of drug use in the youth population. This includes young people between the ages of approximately 9 and 19. The majority of information on drug use comes from students in Grades 7 through 13. The

drugs included for review are as follows: alcohol, cannabis, cocaine, other illicit drugs (hallucinogens, speed, heroin, and inhalants), and prescription drugs (barbiturates, tranquilizers, and stimulants). For each drug, information is presented on its effects, its prevalence among the youth population and the frequency with which it is used, the characteristics of users, and the problems which may result from use.

The volume of information for most drugs is too large to incorporate studies from all countries. This review covers studies done in North America with emphasis on those conducted in Canada. Included are cross-sectional studies of youths from New Brunswick (Campbell, 1986), British Columbia (Chamberlayne, Kierans, & Fletcher, 1988), and across Canada (Health and Welfare Canada, 1981; 1982), as well as repeated cross-sectional studies of students from Ontario (Smart & Adlaf, 1989), Vancouver (Hollander & Davis, 1983), Montreal (Desranleau, 1985), and the United States (Johnston, O'Malley, & Bachman, 1988). We also refer to several other reviews of various aspects of drug use. Our main source of information on the pharmacological and historical aspects of each drug is *Drugs and Drug Abuse: A Reference Text* (Jacobs & Fehr, 1987). Readers who require more detailed information should consult the sources listed in our bibliography.

## 1.0 ALCOHOL

### 1.1 *The Nature and Effects of Alcohol*

Ethyl alcohol is the most important constituent of alcoholic beverages. Most commercially produced table wines have 10% to 14% alcohol by volume. Fortified wines such as sherry or port may have 18% to 20% with the addition of extra alcohol. Most distilled beverages have 35% to 45% alcohol. A 12-ounce bottle of beer contains about the same amount of alcohol as 1 1/2 ounces of whisky, or 5 ounces of table wine, or 3 ounces of fortified wine. Almost all (98%) alcohol is metabolized by the liver, which can change alcohol into carbohydrates at the rate of about one ounce per hour for a 68 kg (150 lb) person.

The effects of alcohol depend on what beverage and how much is drunk, how quickly it is drunk, and the size and drinking experience of the drinker. The major effects of alcohol in the system are on the stomach, liver, and the brain's reticular activating system which controls wakefulness. Alcohol is classed as a sedative/hypnotic, so that although one or two drinks often seem to increase talkativeness and activity, this is probably due to a lessening of anxiety and inhibitions. Three or four drinks usually slow down thought and judgment and impair coordination. After five or six drinks vision is often blurred, speech is fuzzy and hesitant, and reaction times are slowed down considerably. More than seven or eight drinks usually result in staggering, loss of balance, and sometimes sleep. Very large

doses can produce death by decreasing the brain's control over breathing.

### *1.2 Current Use and Trends - (see Table 2.1)*

Alcohol is the most widely consumed substance among young people. In addition, use begins quite early. Results from the *Canada Health Survey* indicate that among a sample of 15 to 19 year olds, the majority began using alcohol at the age of 14 or 15 (Health and Welfare Canada, 1981). A Gallup study which included Canadian youths aged 12 to 19 estimated the average age for first trial as 12 years (Health and Welfare Canada, 1982). The majority of studies indicate that by Grade 7 or 8 (ages 13 - 14) approximately half of students have used alcohol in the past year (Smart & Adlaf, 1989; Chamberlayne et al., 1988; Campbell, 1986; Health and Welfare Canada, 1981).

American and Canadian surveys report that anywhere between 60% and 80% of students have used alcohol in the past year. For instance, most recent figures show that 66.2% of students in Ontario (Smart & Adlaf, 1989), 74.4% of students in British Columbia (Chamberlayne et al., 1988), and 70.3% in New Brunswick (Campbell, 1986) used alcohol in the past year. Earlier studies report comparable findings: 70.4% of students in rural Alberta (Bakal, Milstein, & Rootman, 1975), and 61.6% of students in Vancouver (Hollander & Davis, 1983) used alcohol in the past 6 months. Figures from Montreal are lower; in 1984 47.3% of high school students reported use of alcohol. National data indicate that 64% of youths 12 - 19 years of age (Health and Welfare Canada, 1982) and 79.5% of students 15 - 19 years of age (Health and Welfare Canada, 1981) had used alcohol in the past year. In the United States 85.7% of senior high school students (18 years old) used alcohol in the past year (Johnston et al., 1988). This is comparable to Canadian senior students (Smart & Adlaf, 1989; Chamberlayne et al., 1988; Campbell, 1986).

Typically, surveys show that adolescent drinking is infrequent. For example, in Vancouver (Hollander & Davis, 1983), only 29.5% of students drank as much as seven or more times in the past six months. In Ontario, 41.3% of drinkers (27.4% of total) drank only on special occasions in 1989 and a further 21.8% (14.4% of total) drank only once a month or less (Smart & Adlaf, 1989). Similarly, in British

Columbia (Chamberlayne et al., 1988) and New Brunswick (Campbell, 1986), 20.6% and 20.5% respectively drank only on special occasions, while 19.9% and 17.4% respectively drank once a month or less in the past year. Heavier levels, indicating problem drinking, are also infrequent. Approximately 1% of students from Ontario, British Columbia, and New Brunswick report daily drinking (Smart & Adlaf, 1989; Chamberlayne et al., 1988; Campbell, 1986).

Systematic trend data for periods prior to the late 1970s are not available for alcohol use among students. The only Canadian estimates available are from Metro Toronto and they indicate an increase in drinking from 46.3% in the past six months in 1968 (Smart & Fejer, 1975) to 70.7% in the past year in 1981 (Smart & Adlaf, 1987). Much of this increase occurred in the mid-1970s, and is perhaps the result of a 1971 reduction in Ontario's drinking age (Smart & Goodstadt, 1977).

Since 1978-79, several studies have found reductions in the level of adolescent drinking. The proportion of drinkers in Vancouver, for example, dropped from 77.6% in 1978 to 61.6% in 1982 (Hollander & Davis, 1983). Ontario data show a statistically significant reduction in the proportion of drinkers from 76.3% in 1977 to 66.2% in 1989 (Smart & Adlaf, 1989). Since 1975 the proportion of drinkers among seniors in the United States has remained stable at around 87% (Johnston et al., 1988).

### *1.3 Characteristics of Users - (see Table 2.1)*

A variety of social characteristics are associated with drinking and heavy drinking. Most studies show, for example, that older students in the higher grades are more likely to be drinkers, and to drink frequently (Smart & Adlaf, 1989; Hollander & Davis, 1983; Chamberlayne et al., 1988; Campbell, 1986). While 50% to 60% of students aged 14 or younger report drinking, they are not likely to drink more than once a month. Male students have also traditionally been more likely than females to use alcohol. This difference, however, may be becoming less pronounced. For example, while 51.7% of males and 40.4% of females in Metro Toronto reported drinking in 1968, males and females in Ontario were about equally likely to use alcohol in 1989 (68.1% versus 64.5% respectively).

Other provincial and national studies conducted since the mid-1970s have also found little difference between males and females in reporting alcohol use (Hollander & Davis, 1983; Chamberlayne et al., 1988; Health and Welfare Canada, 1982). Contrary to these patterns, recent data from New Brunswick indicate that males are significantly more likely than females to report alcohol use (Campbell, 1986).

American national data (Johnston et al., 1987) parallel Canadian findings. In 1986, 69% of males versus 61.9% of females reported using alcohol in the past 30 days, only a 7.1% difference compared to a difference of 12.8% in 1975 (75% versus 62.2%). A decline in drinking among males is largely responsible for this closing gap.

While males and females may be increasingly equally likely to use alcohol, several provincial (Campbell, 1986; Chamberlayne et al., 1988; Smart & Adlaf, 1987), national (Health and Welfare Canada, 1981; 1982), and American studies (Johnston et al., 1988) have found that males are more likely than females to drink frequently. Even here, however, the differences between the sexes may be narrowing. In the 1989 Smart & Adlaf Ontario survey, .8% of males compared with .02% of females reported daily drinking in the past year.

Other variables which may be related to alcohol use include some socio-economic measures and peer and parental influence. For example, data from the *Canada Health Survey* found that the prevalence of alcohol use was significantly associated with income and occupational level. At the same time, however, the volume of alcohol consumed was not. Ontario studies indicate that Jewish students are more likely than Protestant or Catholic students to report drinking. Students with no religion or of other religions are, on the other hand, the least likely to use alcohol and to drink frequently (Smart & Adlaf, 1983).

In addition, use of alcohol among students has been found to be related to parental, intrafamilial, and peer patterns of use (Smart & Fejer, 1972; Annis, 1974). Studies conducted in the United States have provided similar results (Kandel, 1978). Other studies have shown that drinkers are more likely to have friends who drink or who have favourable attitudes toward drinking (Hollander & Davis, 1983).

### 1.4 Alcohol-Related Problems

Some evidence (Kalant, LeBlanc, & Gibbins, 1971; Goldberg, 1943) shows that inexperienced drinkers, which include many young people, have less tolerance for alcohol (i.e., greater sensitivity to the effects of alcohol). Due to this lower tolerance, youths are probably more likely than adults to experience problems. The problems experienced by youths are, however, of a slightly different nature. For example, few young people show the signs of alcoholism, such as liver cirrhosis and withdrawal symptoms, that are found in clinically treated older alcoholics (Vingilis & Smart, 1981). Only a small proportion of clinically treated alcoholics are aged 21 and under and many of them are multiple drug users.

At the same time, signs of heavy or problematic levels and patterns of use among some students have been found. For example, the 1989 Ontario school study found that among drinkers 35.3% became drunk, 42.8% became tight (i.e., found it difficult to walk properly or talk clearly), and 49.1% had consumed five or more drinks one or more times a week in the past four weeks. In British Columbia, over half of drinkers had consumed five or more drinks and had been drunk or tight on at least one occasion in the past four weeks (Chamberlayne et al., 1988). In New Brunswick, 19.4% of all students had been drunk and 22% had consumed five or more drinks on one occasion in the past 30 days (Campbell, 1988).

The alcohol-related problems of adolescents are primarily social, familial, and legal rather than medical (see Smart, 1980, for a review). For example, 88% of students in an Alberta study (Longwoods, 1982) said that parents disapproved of their drinking. This study also found that 38% of heavy drinkers had difficulties with friends, and 50% had trouble with parents or their family. These problems occurred rarely for light drinkers but were more common among moderate drinkers. In Ontario 2.9% of students in 1983 said their parents thought they drank too much while about 4.0% in British Columbia said that their parents thought they drank too much. In 1986, 3.8% of students in New Brunswick reported that their parents were concerned about their drinking.



Because it is illegal to drink or possess alcohol under the age of 19, young drinkers are particularly vulnerable to legal problems. In Toronto alone, there are more than 2,500 charges per year for underage drinking. Many of those convicted are delinquent males who are heavy daily drinkers (Vingilis, Ogborne, Kijewski, & Salutin, 1980). Of all drunkenness charges in 1973 in Toronto, 7.6% involved people aged 17 and under (Smart, 1980). According to most recent estimates, 5.8% of students in Ontario, over 10% of students in British Columbia, and 10.2% of student drinkers in New Brunswick (6.9% of total sample) had been warned by police because of their drinking.

Drinking in cars seems to be a sign of problem drinking with adolescents. Vingilis et al. (1980) studied 100 people charged with underage alcohol consumption or possession in Toronto. Only 25% said that most of their drinking was done at home; 35% drank in cars; and 9% estimated that half or more was done in cars. In a multi-variate analysis of problem drinking among adolescents, Smart and Gray (1979) found that "drinking in cars" and "not drinking at home" were the best predictors of problem drinking as measured by the Williams Scale.

The extent of drinking/driving and related accidents has been investigated by Vingilis (1980) using data from the 1979 Ontario school survey. Drinking/driving was common for students, even those under the legal drinking age. About half of students in Grades 11 and 13 drove after drinking two or more drinks at least once in the past year, with 44% doing so four or more times. However, only 3% of driving

students had been convicted for drinking/driving offenses. About 20% of students were involved in some accident in the past year and 11.9% were involved in an alcohol-related accident. The typical drinking driver was an older, frequently-drinking male with poor school grades who had been licensed for a few years and had driven many miles.

Findings from the 1987 Ontario student survey (Smart & Adlaf, 1987) indicate that the incidence of drinking/driving-related accidents has declined significantly. Only 18.8% reported driving within an hour of having one or two drinks, 5% doing so four or more times. Half as many (1.7%) as in 1979 were convicted of some drinking/driving offence, while only 2.3% were involved in an accident after drinking. Recent data from British Columbia and New Brunswick also indicate that only approximately 2% of students were involved in drinking/driving accidents.

### 1.5 Conclusion

Alcohol is, by far, the most widely used drug among young people and is consequently the most likely drug to cause problems. Approximately half of all students have used alcohol by the time they are in Grade 7 or 8, and well over half have used alcohol in the past year or in the past 6 months. Drinking is both more likely and more frequent among older students and among males. Gender differences appear, however, to be narrowing. Trend data indicate that while drinking among youths today is quite common, it has declined since 1978. Hopefully this trend will continue.

## 2.0 CANNABIS

### 2.1 The Nature and Effects of Cannabis

The *Cannabis sativa* plant grows wild in almost all parts of the world, including Canada, except in the polar regions. It can also be cultivated. There are more than 60 chemicals called cannabinoids which are unique to the plant. The main psychoactive component of the plant, however, is tetrahydrocannabinol (or THC). Cannabis grown in Canada contains considerably less THC than imported varieties (BakerGough, T.A., Bogon, & Gough, 1980; Green & Miller, 1975). It is for this reason that, in all likelihood, most of the cannabis which is smoked by Canadians comes from outside the

country. Nonetheless, cannabis is widely available. According to one study (Sorfleet, 1976), even in a relatively small city like Ottawa, there is a well-organized network of importers and large- and small-scale dealers, as well as amateur dealer-users.

Street samples of cannabis come in three forms: a tobacco form called marijuana, made from dressed leaves, stems, and seeds and containing a maximum of about 5% THC; hashish, made of dried and pressed flowers and leaves with some resin, containing up to 12% THC; and hashish oil (hash oil), a crude extract that usually contains about 20% THC, although rare samples may have up to 60% THC.

All forms are usually smoked in cigarettes or pipes, and are almost never injected. Marijuana and hashish may also be baked in edible goods, such as cookies, and then eaten.

Cannabis is classified as a hallucinogen, though its potency is far less than that of other hallucinogens (e.g., LSD). The effects of cannabis depend upon the concentration of THC, the method of administration, and the experience of the user. For example, the effects of hashish and hashish oil are more striking and longer lasting than those of marijuana. Similarly, smoking the drug produces more rapid effects than does eating it. Cannabis users usually require some training or experience in order to get the euphoric effects. Expectation and knowledge about such effects seem to be necessary in order to achieve them.

The main short-term effects of cannabis (Tart, 1971; Clark & Nakajima, 1968) include: euphoria, hilarity, and heightened sensations; misperception of time; an increase in pulse rate and some reddening of the eyes; deficits in attention and impaired short-term memory.

## 2.2 Current Use and Trends - (see Table 2.1)

Prior to the mid-1960s, there was almost no use of cannabis among Canadian youths or high school students. The late 1960s, however, saw a wave of interest in cannabis which has continued into the present.

At its peak, around 1978-1979, cannabis was used by 38.2% of students in Vancouver in the past 6 months (Hollander & Davis, 1983), and by 31.7% of students in Ontario in the past year (Smart & Adlaf, 1989). In 1976, 34.6% of students in Montreal used cannabis (Desranleau, 1985). This compares to rates from the late 1960s which were as low as 6.7% in Toronto and 8.6% in Montreal. At the national level, the Le Dain Commission found that only 1.9% of students used cannabis in 1967-68 (Le Dain, 1972).

Since 1979, cannabis use has decreased. The 1982 Health and Welfare Canada youth study indicated that 19% of young people between the ages of 12 and 19 used marijuana in the past year (Health and Welfare Canada, 1982). In Ontario, student use in 1989 was half (14.1%) of what it was in 1979 (Smart

& Adlaf, 1989). Use also dropped by half in Montreal to 15% in 1983 (Desranleau, 1985). Though higher overall, rates of use in Vancouver dropped from 38.2% in 1978 to 30.7% in 1982. The current level in British Columbia, as a whole, is 30% (Chamberlayne et al., 1988), while in New Brunswick it is closer to Ontario figures at 22.8% (Campbell, 1986).

While rates of cannabis use among senior high school students in the United States are somewhat higher than they are in Canada, a parallel trend exists. Cannabis use also peaked in 1979 at 50.8% users in the past year after a dramatic increase the decade before. In 1980, use started on a downward trend. Most recent figures show that 36.3% used cannabis in the past year (Johnston et al., 1988) compared to 27.7% of students in Ontario aged 18 or over (Smart & Adlaf, 1989).

Despite this downward trend cannabis remains the most widely used illicit substance among young people in both the United States and Canada. In addition, while most students use infrequently, there are many exceptions. For example, while over two-thirds of student cannabis users in Ontario used the drug less than 10 times during the past year, 9.7% used it 40 or more times. Heroin alone was more likely to be used 40 or more times in the past year. At the same time, more users report using the drug only once or twice, while fewer report more frequent use (Smart & Adlaf, 1989).

## 2.3 Characteristics of Users - (see Table 2.1)

Cannabis use varies with demographic and social characteristics. Until very recently studies have reported that more males than females use cannabis (Smart & Fejer, 1975; Smart & Adlaf, 1987; Whitehead, 1970; Campbell, 1986; Chamberlayne et al., 1988). However, for the first time since 1977, the 1989 Ontario survey (Smart & Adlaf, 1989) showed no significant difference between males and females. This similarity in rates (14.7% of males and 13.5% of females) is largely due to a significant decline among males, dropping from 18.7% in 1987 to 14.7% in 1989. The overall trend shows a stronger decline among males than females since 1977.

Age is also an important variable. Most studies have found that cannabis use is lowest among younger

students (Health and Welfare Canada, 1982; Smart & Adlaf, 1989; Smart & Fejer, 1975; Whitehead, 1970; Hollander & Davis, 1983; Campbell, 1986; Chamberlayne et al., 1988). Those in the intermediate grades seem to be most likely to report use of cannabis. The difference, however, between those in the highest grades and those in the intermediate grades is not great.

There are certain other groups within the youth population who appear to be more likely to use cannabis. For example, according to one study, 90% of young people in youth hostels were using cannabis (Loken, 1973). In another study, Annis and Watson (1975) found that among a sample of high school students in Timmins, Ontario, dropouts had a higher rate of cannabis use both before and after they had dropped out of school than did non-dropouts. Smart and Blair (1980) found that non-students aged 14-25 had much higher rates of use than students.

Studies (e.g., Sadava & Forsyth, 1977) have shown that cannabis users had more social support for that use, fewer sanctions against it, and parental models favouring use, and were members of families with a lower level of social conformity. It has also been found (Smart & Blair, 1980) that 100% of youths who experienced social and legal problems, such as being arrested for drug use, had used cannabis. Only 32% of those who had never experienced these problems used cannabis.

In terms of personality characteristics, Kohn and Annis (1977; 1978) found that cannabis users were often sensation seekers, and that cannabis use is more common among people who are more radical in economic and political thinking and whose attitudes towards cannabis legalization are very positive. Smart, Fejer, and White (1971) found that cannabis use was more likely among students who felt alienated — that is, who felt that they had no firm rules, standards, or values to worry about, and who felt powerless. Using a variation of the Taylor anxiety scale, Smart and Fejer (1972) also found that cannabis users had a higher rate of anxiety. Almost four times as many users as non-users had received

treatment for psychological problems (19% versus 5.2% respectively).

#### *2.4 Cannabis Problems*

For many years, cannabis problems were, after those associated with alcohol, the most frequently reported by people seeking treatment at the Addiction Research Foundation. Although cocaine has become the second most problematic drug, cannabis-related problems still constitute an important number of cases in treatment.

When used in higher doses and for longer periods of time, cannabis may have numerous harmful or unpleasant effects. Drawing on a summary produced by an international group of scientists who met under the auspices of the World Health Organization and the Addiction Research Foundation of Ontario (ARF/WHO, 1981), the main harmful or unpleasant effects of cannabis are as follows: somatic reactions (e.g., pains in throat and chest, dry mouth, nausea); anxiety, restlessness, confusion and hallucination; chronic intoxication; respiratory toxicity (e.g., bronchitis, sinusitis); tolerance, dependence; and impaired short-term memory, thinking, and learning ability. Whether or not heavy and continuous use of cannabis may result in permanent brain damage has not been established.

According to one study (Annis & Smart, 1973), 19.1% of students in Toronto reported having experienced confusion, anxiety, or unpleasant effects on at least one occasion, but only 1.9% more than seven times. Rates were about twice as high among students from Timmins. More recent data (Smart & Adlaf, 1982) indicate that rates of adverse reactions among students have increased. There is also concern about cannabis use among students and problems with the law. In New Brunswick, 16.8% of students who held a driver's licence drove after using cannabis, and 4.3% reported being involved in an accident under those circumstances (Campbell, 1986). In British Columbia, around 10% of all students have been arrested or warned because of their drinking or drug use (Chamberlayne et al., 1988).



## 2.5 Conclusion

Since the late 1960s, cannabis has been a popular drug among young people. At its peak, it was used by approximately one-third or more of the Canadian youth population, and by even more in the United States. Current rates of use are considerably lower, and in some cases reflect a 50% decrease since 1979. Males and older youths remain the most likely to use cannabis.

## 3.0 COCAINE

### 3.1 The Nature and Effects of Cocaine

Cocaine is a powerful stimulant and local anesthetic. It is an alkaloid derived from the leaves of the coca bush or *Erythroxylon coca*, which grows wild or under cultivation in parts of South America. The majority of coca is cultivated in Peru, Chile, and Bolivia, although lesser amounts are grown in Java, Mexico, the West Indies, and India (Clark, 1973).

Coca leaves have been used since 2500 B.C. by the native peoples of South America (Erickson, Adlaf, Murray, & Smart, 1987; Gay, Sheppard, Inaba, & Newmeyer, 1973). The traditional method of use among the Indians was to chew the leaves. Today, however, coca paste is also being used in some urban centres in Peru (Jeri, 1984) where it is smoked with cigarettes.

In order to produce cocaine, the leaves of the coca bush are first picked, then stored in drums with kerosene or other solvents. This makes a coffee-coloured paste which is sold to laboratories for processing into cocaine. Pure cocaine is a white or almost crystalline powder. The quality of cocaine may vary from 15% to 80% pure. It is often combined with other substances including lactose, powdered milk, talcum powder, sugar, or other stimulants such as procaine or lidocaine. Several well-known combination products have emerged, for example, cocaine and heroin ("speedball," "whizbang," or "dynamite"), cocaine and speed ("bombita"), and cocaine and morphine (also known as "whizbang").

Cocaine use has had a long history in Canada. It was used in a variety of drinks, including the widely

Despite this decrease, cannabis is a popular drug preceded only by alcohol and tobacco. In most areas today, about 15% to 20% of students report using cannabis. Estimates from British Columbia, however, show that 30% of the student population uses the drug. It is clearly important, then, that we continue working toward decreasing cannabis consumption among youths.

popular Coca-Cola, in patent medicines, tablets, and even cigarettes and chewing gum. Today cocaine is primarily restricted to non-medical, illicit use. The exception to this is cocaine which comes in spray or liquid form (5% to 10% cocaine) and which is used by surgeons and otolaryngologists as a local anesthetic during surgery on the eyes, ears, nose, or throat.

Cocaine — referred to variously as "coke," "snow," "flake," "blow," "C," or "stardust" — is usually sniffed or "snorted" with a straw after being chopped finely with a razor blade and laid out in narrow "lines" about 2.5 cm long. It may also be applied to other mucous membranes such as the mouth or to the genitalia, or it may be injected. When converted into its free base form, cocaine can be vaporized in a pipe and inhaled into the lungs. "Crack" or "rock," which has recently received considerable attention, is one particular free base preparation. It is made by mixing and subsequently heating baking soda and a cocaine solution. The dried residue is then smoked in a free base pipe.

Cocaine is classified as a central nervous system stimulant, and has effects similar to those of amphetamines. Low doses and short-term use produce euphoria, a sense of well-being, elevated self-confidence, and alertness and energy. At this level of use, cocaine may also inhibit appetite and sleepiness, as well as increase garrulousness. This phase is, however, often followed by a period during which the user experiences agitation and anxiety. When higher doses are used, these effects may intensify and may be coupled with paranoid ideation, tremors, muscle twitching, or, in severe cases, seizures.

### 3.2 Current Use and Trends - (see Table 2.1)

Despite the high price of cocaine, estimates of world consumption increased from 35-45 metric tons in 1981 to 50-61 metric tons by 1983. Use, however, seems to be restricted to the developed western world and to a few South American countries (Erickson et al., 1987).

In Canada, current annual use among students ranges from 3.3% in New Brunswick (Campbell, 1986), 3.7% in Montreal (Desranleau, 1985), and 2.7% in Ontario (Smart & Adlaf, 1989), to 6.1% in British Columbia (Chamberlayne et al., 1988). These levels are consistent with levels recorded since the late 1970s. In 1978, 5.6% of students in Vancouver used cocaine in the past six months. By 1982, this use had increased to 7% (Hollander & Davis, 1983). In Ontario, however, use of cocaine in 1989 was significantly lower than rates in 1981, 1983, and 1985. In contrast to these figures, estimates of cocaine use among American students are higher. According to Johnston et al. (1988), 10.3% of senior high school students have used cocaine in the past year. This figure, however, represents the first significant drop in use in eight years. Similarly, while only 1% of students in Ontario (Smart & Adlaf, 1989) and 1.6% of students in British Columbia (Chamberlayne et al., 1988) have used crack, 4% of students in the United States have done so in the past year.

The majority of cocaine users report infrequent use. Among Ontario students who have used the drug in the past year, 59.1% (1.6% among the total) did so only once or twice, while 7.8% (.2% among the total) used 40 or more times. Similar figures exist for British Columbia, where 3.8% of the total sample used one or two times and .4% used 40 or more times (Chamberlayne et al., 1988). In New Brunswick, 50% of cocaine users used only once or twice (Campbell, 1986).

### 3.3 Characteristics of Users - (see Table 2.1)

Within both Canada and the United States, male students are more likely than female students to report cocaine use. In Ontario, 5.1% of males reported using cocaine, while 2.4% of females did so in the past year. This represents a significant difference and one which has remained fairly stable since 1977. However, males were no more likely

than females to use crack specifically (1.0% of both sexes) (Smart & Adlaf, 1989). In British Columbia, males are more likely than females to use both cocaine generally and crack (6.9% versus 5.4% respectively for cocaine, and 2.0% versus 1.3% respectively for crack) (Chamberlayne et al., 1988). Similarly, in New Brunswick, 4.5% of male students used cocaine in the past year versus 2.5% of females (Campbell, 1987).

In the United States, males are also more likely than females to use cocaine (in 1987 19.2% versus 14.3% respectively), though findings suggest that this gap may be narrowing (Johnston et al., 1987). In Vancouver, in 1982, males and females were in fact equally likely to have ever used cocaine (Hollander & Davis, 1983).

As might be expected, younger students are less likely to use cocaine than their older counterparts. For example, in 1989, 1.1% of Grade 7 students in Ontario used cocaine in the past year, while 4.2% of those in Grade 13 did so. Likewise, in British Columbia, 3.2% of those in Grade 8 used cocaine versus 10% of those in Grade 12. In Vancouver, prevalence increased by age in both 1978 and 1982 (Hollander & Davis, 1983).

### 3.4 Cocaine Problems

As mentioned earlier, cocaine is now the second most important drug problem for people seeking treatment at the Addiction Research Foundation; in 1989, cocaine was the primary problem for 20.8% of patients. Long-term cocaine use produces extreme agitation, nervousness, and excitability. Visual and auditory hallucinations may be experienced. Many report a sensation (called formication) of insects crawling under the skin. A study of 111 cocaine users in the community (Erickson et al., 1987) showed that 52% had one or more serious problems such as hallucinations, violent behaviour, frequent sore or bleeding nose, frequent mental or physical exhaustion, and craving for its use; 51.4% reported having experienced an uncontrollable craving to use cocaine. Other problems which may also surface include infection at injection sites and an array of social difficulties (e.g., financial or legal problems).

Although death resulting from the use of cocaine is uncommon, its incidence appears to be increasing.



Most fatalities occur among those who inject the drug; however, death has occurred among users who snort or freebase.

Tolerance is unlikely to result from cocaine use. This question is controversial, however, since while some users employ the same dose without experiencing a decline in pleasure, others, especially heavy users, may need to increase their intake in order to maintain the same level of pleasure. On the other hand, cocaine dependence, both physical and psychological, is well established. Withdrawal symptoms are marked by fatigue, disturbed sleep, hunger, irritability, and depression.

## 4.0 OTHER ILLICIT DRUGS: HEROIN, INHALANTS, HALLUCINOGENS, AND SPEED

The most widely used drugs among students are alcohol, tobacco, and cannabis. Other illicit substances are, however, used and are also of concern. Many of these other substances are extremely potent and produce dangerous effects. In this section, we will review heroin, inhalants, hallucinogens, and speed and their use among students. Inhalants are included here because in at least one province (Alberta) their use is illegal.

### 4.1 Heroin

#### 4.1.1 The Nature and Effects of Heroin

Heroin is a semisynthetic drug produced by chemical modification of morphine and is classified as a narcotic analgesic or opiate. It is often referred to as “dust,” “H,” “horse,” “junk,” “smack,” “scag,” or “black tar.”

In pure form, it is a white powder. It is, however, often mixed with a variety of other substances, and street samples vary enormously in terms of potency and general quality. Seized samples analysed for the Le Dain Commission (1973) ranged from 5.4 mg to 92.5 mg in heroin content, with a mean of 33 mg. In one set of samples, the Commission found that only 9 out of 18 contained any heroin at all. Similarly, among 12 heroin samples analysed by the Addiction Research Foundation in 1975-1980, only two actually contained heroin (Smart, 1983).

### 3.5 Conclusion

Attention has been recently focused on the use of cocaine and especially crack among students. Survey data indicate, however, that rates of use among students in Canada are low, ranging from 3.3% in New Brunswick to only 6.1% in British Columbia, and have remained at a constant level over the years. In fact, recent trend data from both Canada and the United States show a decline in use since the previous year (Johnston et al., 1988; Smart & Adlaf, 1989). Young people are more likely to use several other drugs including medical substances, stimulants, and hallucinogens. American data also indicate that use of crack specifically may have levelled out. These trends could, however, change in response to lower prices for cocaine, newer cocaine-based products, or other factors.

Although heroin may be sniffed, smoked, or swallowed, it is most often injected, except among first-time users. Injecting heroin produces both more immediate and more intense effects. At the same time, injecting heroin can produce addiction more rapidly than if the drug is taken orally.

Up until the mid-1950s, heroin had been used legitimately as an anesthetic and as a powerful analgesic. Because of its high dependency liability, however, it was banned in many countries, and remains banned in some. In Great Britain it is today used for severe pain and in maintenance programs for heroin-dependent individuals. In 1985, the Canadian government altered the Narcotic Control Act so as to allow the medical use of heroin in the treatment of severe pain. It is, however, rarely prescribed.

In Canada heroin which is used for medical purposes is imported from Great Britain. Street heroin enters Canada from a variety of other countries. Currently supplies come mainly from Burma, Thailand, and Laos where it is produced in illicit laboratories.

The effects of taking low doses of heroin for a short period of time include suppression of pain, relaxation and drowsiness, euphoria, peacefulness, and contentment. This euphoria, however, seems to occur in the early stages of use and is not experienced by users who become addicted and

tolerant to heroin. At this level heroin can also hinder concentration and vision and induce nausea, vomiting, and sweating.

#### *4.1.2 Current Use and Trends - (see Table 2.1)*

While heroin has been problematic among some populations, it has never been popular among students. This is the picture that emerges across Canada and in the United States. According to 1989 Ontario data (Smart & Adlaf, 1989), only 1.2% of students used heroin in the past year. In both British Columbia (Chamberlayne et al., 1988) and New Brunswick (Campbell, 1986), 1.7% reported use in the past 12 months. In the United States even fewer students (.5% in 1987) report using heroin (Johnston et al., 1988). Trend data indicate that these rates have remained stable over the past decade (Johnston et al., 1988; Hollander & Davis, 1983; Smart & Adlaf, 1989). Highest levels in Ontario were recorded in 1979 at 2.3%. From this time, use dropped. In the United States, levels have never reached 1% since 1976.

Frequency of heroin use is also low among youths. In Ontario 60.7% of users (.7% of total sample) used only once or twice in 1989 (Smart & Adlaf, 1989). In New Brunswick (Campbell, 1986) and British Columbia (Chamberlayne, 1988), figures are comparable; 59.1% of users and .8% of the total sample respectively used heroin once or twice in the past year. At the same time, however, a substantial portion report using heroin 40 or more times. In Ontario, 7.8% of users and .1% of the total sample and .3% of students in British Columbia used heroin 40 or more times in the past year.

#### *4.1.3 Characteristics of Users - (see Table 2.1)*

Males are again, sometimes significantly, more likely than females to use heroin in both Canada and the United States (Hollander & Davis, 1983; Chamberlayne et al., 1988; Campbell, 1986; Johnston et al., 1988; Smart & Adlaf, 1989). There are no clear age patterns. Heroin use tends, however, to be less likely among older students (Chamberlayne et al., 1988; Smart & Adlaf, 1989; Campbell, 1986).

Other studies indicate a slightly different picture when considering use among young people, including those not enrolled in school. Stephenson and Pollay (1974), for example, found that 15% of

adolescents assessed for child and family welfare agencies in Vancouver had used heroin. A follow-up inquiry of social workers in the same agencies found that 6% of these adolescents had used heroin, almost all of whom were female and many of whom were Indian or part-Indian. Virtually all had extensive histories of delinquency and multiple placements in foster homes.

#### *4.1.4 Heroin Problems*

When used at higher doses effects intensify and sleep is more probable. With very high doses heroin can produce deep sleep or even coma and sometimes death. When death does occur, it is usually a result of respiratory arrest or other respiratory or cardiovascular complications. Long-term use of heroin does not seem to produce brain damage, psychoses, or any serious diseases. The greatest concerns are, specifically, with infection at injection sites and collapsed veins, and more generally with a deteriorated lifestyle (i.e., malnutrition, poor housing, untreated illness, etc.).

In addition, heroin can produce tolerance and both physical and psychological dependence. Withdrawal symptoms include restlessness and yawning followed by sleeplessness, chills, and hot flashes. Breathing is often irregular and cramps are felt in the legs, back, and abdomen. Vomiting, diarrhea, and perspiration may also occur. Tremors as well as "gooseflesh" are common.

#### *4.2 Inhalants*

##### *4.2.1 The Nature and Effects of Inhalants*

Almost since the industrial revolution began, organic solvents and glues have been available which have toxic effects when inhaled. The first indications that glue was being sniffed for kicks or recreational purposes came in the 1940s (Fernandez, 1978). The first Canadian cases were not reported until 1964 (Gellman, 1968).

Glues and solvents contain non-alcoholic liquids called volatile hydrocarbons. They are organic liquids produced from petroleum and natural gas. The most commonly (Malcolm, 1969) used include: glues and cements (e.g., airplane glue, plastic tile cement), nail polish removers, thinners, lighter fluid, cleaners, anesthetics (e.g., ether, chloroform,

nitrous oxide or “laughing gas”), gasoline, aerosols, and vasodilators. These substances are virtually always inhaled, although in the past ether was swallowed to produce intoxication.

Most of the psychological effects of inhalants are quickly felt but dissipate within a few minutes after brief sniffing. Effects can, however, last for hours after prolonged sniffing. Making definite statements about the effects of all glues and solvents is very difficult since inhalants and their effects are highly diverse. In addition, these effects depend upon the amount used, the past experience of the user, and even the presence of other people. Generally speaking, users may experience euphoria and exhilaration, and some have vivid fantasies. Deep inhalation results in a state similar to alcohol intoxication, and is marked by disorientation, slurred speech, muscular uncoordination, staggering, and eventually unconsciousness.

#### *4.2.2 Current Use and Trends - (see Table 2.1)*

Student use of glue and other solvents is low. Currently glue is used in Ontario by 1.9% of students while 3.3% use other solvents (Smart & Adlaf, 1989). This compares closely to figures from British Columbia where 2.7% of students use glue, and 3.8% use other solvents (Chamberlayne et al., 1988) and from New Brunswick where 2.7% use glue and 4.8% use other solvents (Campbell, 1986). Use of inhalants is also infrequent. Most have used only once or twice in the past year (Smart & Adlaf, 1989; Chamberlayne et al., 1988; Campbell, 1986).

Rates are higher in the United States where 6.9% report having used inhalants in the past year (Johnston et al., 1988). In addition, use has continued to increase since the early 1970s (Johnston et al., 1988). In Vancouver, use of inhalants in the past six months also increased from 3.9% in 1974 to 4.4% in 1978 and 6.2% in 1982 (Hollander & Davis, 1983). More recent data from British Columbia as a whole, however, indicate that only 4.9% of students used inhalants in the past year (Chamberlayne et al., 1988). On the other hand, trend data for Ontario indicate that since 1977 both glue and solvent use have declined, although only slightly (Smart & Adlaf, 1989).

#### *4.2.3 Characteristics of Users - (see Table 2.1)*

As with other drugs, glue and solvent use is more common in some groups than it is in others. Males are typically more likely than females to use either glue or solvents (Johnston et al., 1987; Smart & Adlaf, 1989; Campbell, 1986; Chamberlayne et al., 1988). This difference is not always great. In Vancouver, males and females were equally likely to use inhalants in 1974 (Hollander & Davis, 1983). The major difference, however, occurs between ages/grades. Both glue and solvents are more likely to be used by younger students. In Ontario, reported use is highest among those in Grade 7 to 9 and significantly declines with increasing age (Smart & Adlaf, 1989). Similar patterns exist in other parts of Canada (Campbell, 1986; Chamberlayne et al., 1988).

According to one study (Annis & Watson, 1975), inhalant use is more than twice as high among dropouts than it is among non-dropouts. There is also some suggestion (Wilkinson, 1978) that use is more likely among impoverished young people, and for solvents, especially gasoline, among Native Indians (Liban & Smart, 1982; Lynn, 1973; Angle & Eade, 1975).

#### *4.2.4 Inhalant Problems*

Long-term effects of inhalants include pallor, fatigue, tremors, weight loss, and irritability. Some studies have shown effects on bone marrow (Malcolm, 1969) and kidney and liver damage is also possible. With some solvents, however, this damage seems to be reversible after sniffing has stopped. Although permanent brain damage seems to be unusual, except in very heavy users, memory loss is not. In a study of 24 young daily users of toluene — a substance present in gasoline, household and model cements, lacquer thinners, and plastics — Fornazzari, Carlen, Wilkinson, and Kapur (1982) found that marked neurological abnormalities occurred in 14 of the users and impaired memory in five. Eleven of these users were studied for a period of two weeks and they showed little improvement. Lead poisoning has also been described in several Canadian cases of gasoline sniffing (Boeckx, Postl, & Coodin, 1977).

Sniffing, especially of glue, has resulted in death either because the solvent depressed the heart rate



or created an abnormal heart rhythm. In addition, deaths have occurred by suffocation in cases where the user is inhaling some substance from a bag. Impulsive, aggressive, or dangerous behaviour due to intoxication and explosions or fires during the use of gasoline, ether, or thinners are also reported (Malcolm, 1969).

### 4.3 Hallucinogens

#### 4.3.1 The Nature and Effects of Hallucinogens

The category of hallucinogens include a wide range of substances with varying effects on mood, sensation, and emotion. Some are completely synthetic, while others derive naturally from plants. Although use of hallucinogenic substances can be traced back to 1600 B.C. and was particularly important among the various Indian tribes of North and South America and the West Indies, they did not become popular among other North Americans generally and Europeans until the past few decades.

The main illicit hallucinogens (excluding cannabis) now available and used in Canada are MDA (methylenedioxyamphetamine), PCP (phencyclidine), and especially LSD (lysergic acid diethylamide). MDA is usually found in pill form but can be injected, while PCP, a veterinary tranquillizer, is a white soluble powder which can be smoked, injected, or taken orally as a liquid or tablet. Both are synthetic substances produced mainly outside of and imported to Canada. LSD is a semisynthetic substance derived from ergot which is a fungus that grows on some grains. A white crystalline substance, it is usually mixed with water or various powders and then is either injected or taken orally.

In the 1950s and 1960s, hallucinogens were medically used for a variety of purposes within the field of psychiatry. They were, for example, used as an aid to psychotherapy (Hoffer, 1965) and in the treatment of alcoholism. Studies have shown, however, that in this latter respect hallucinogens have no beneficial effects (Smart, Storm, Baker, & Solursh, 1967). Today very few hallucinogens are used in clinical medicine; however, some less common types are used as anesthetics in head and neck surgery. Others are used to control a variety of physical problems including spasms, hyper-irritability of the gastrointestinal tract, excessive

salivation, bronchial secretions, parkinsonism, and motion sickness and for certain eye examinations.

In the early 1960s, people began using LSD recreationally for "mind expansion" or "self-exploration." These effects are not emphasized by users today, although in some circles they are still important. The effects of hallucinogenic substances are quite diverse and depend on the dose, attitude and expectation of the user, previous experiences, the setting in which the drug is taken, etc. While some users experience feelings of ecstasy, others experience fearfulness and anxiety. Generally, hallucinogens produce a variety of sensory distortions so that the size, shape, and distance of objects appear altered. In addition, the user's perception of time, space, and self is altered. Short-term memory may also be impaired, while at the same time users may recall long-forgotten past events. These effects may prompt users to believe that they are undergoing some profound mystical or religious experience (Jarvik, 1967; Linton & Langs, 1962; Dittman & Whittlesey, 1959). Physically, hallucinogens can cause increased heart rate and blood pressure, elevated body temperature, reduced appetite, nausea, vomiting, abdominal discomfort, and decreased motor coordination. Depending on the dose taken and on the particular situation in which the substance is used, PCP may produce stimulant, depressant, analgesic, anesthetic, and hallucinogenic effects.

#### 4.3.2 Current Use and Trends - (see Table 2.1)

Rates of use of LSD varied considerably among students in the early 1970s when use was at its peak. On the one hand, only 2% to 3% of students from Halifax and Montreal reported using hallucinogens (Whitehead, 1970; Bilodeau, 1971). On the other hand, 21.2% of Vancouver students (Russell & Hollander, 1974) and 8.5% from Toronto (Smart & Fejer, 1975) reported use of LSD.

Today rates are more stable, though they still show some variation. Figures for 1987 show that among Ontario high school students 5.9% used LSD, 1.1% used PCP, and 4.3% used other hallucinogenic substances in the past year. In comparison, 7.7% of students in New Brunswick report using LSD, while 1.9% used PCP, and 5.2% used other hallucinogens in the past year (Campbell, 1986). In British Columbia, use remains somewhat higher;



8.8% of students reported using LSD while 1.9% used PCP and 11.3% used other hallucinogens. In the United States, 6.4% reported use of any hallucinogen in 1987, while 5.2% reported use specifically of LSD and 1.3% of PCP (Johnston et al., 1988).

Trends in hallucinogen use show a decline since the mid-1970s and early 1980s. In Ontario, the 1989 estimate is significantly lower than the 1981 and 1983 estimates for LSD use and the 1981 estimate for PCP use. In the United States, use is also down from what it has been in previous years. In 1975, 11.2% reported use, almost double the number today who reportedly use hallucinogens (Johnston et al., 1988). In Vancouver, use in the past six months declined from 12.5% in 1978 to 11.7% in 1982 (Hollander & Davis, 1983). Although we do not have recent data for Vancouver, prevalence of use in British Columbia in 1987 is higher at 14.2% (Chamberlayne et al., 1988).

Rates of hallucinogen use appear to be higher in a number of special populations. For example, one study (Liban & Smart, 1982) found that Native Indian students used LSD and other hallucinogens at high rates. Annis & Watson (1975) also found that school dropouts were more likely than non-dropouts to use hallucinogens.

Most studies show that users take hallucinogens infrequently (Campbell, 1986; Chamberlayne et al., 1988; Hollander & Davis, 1983; Smart & Adlaf, 1989). The majority use only once or twice a year. For example, in the Ontario survey, 52.1% used LSD and 61.6% used PCP only one or two times in the past year while a further 18.4% and 10.6% took these drugs three to five times in the past year. Other hallucinogens were used by 64.2% one or two times over the past year and by 15.0% three to five times over the past year.

#### *4.3.3 Characteristics of Users - (see Table 2.1)*

As with most other illicit drugs, hallucinogen use has been found to be more common among males than it is among females. This difference is sometimes significant. In Ontario, for example, males were more likely than females to report use of any hallucinogen in 1989 (6.8% versus 4.9% for LSD; 1.5% versus .7% respectively for PCP; and 4.6% versus 3.9% respectively for other hallucinogens).

In New Brunswick (Campbell, 1986), the difference in use between males and females is equally striking; 10.2% of males versus 5.5% of females report using LSD while 3.1% of males and 1% of females use PCP and 7.8% of males and 2.9% of females use other hallucinogens. In both British Columbia (Chamberlayne et al., 1988; Hollander & Davis, 1983) and the United States (Johnston, 1987), these differences though apparent are not as great.

It is generally found that use of LSD and other hallucinogens is less likely among younger students (Grades 7, 8) than it is among older students in the higher grades (Smart & Adlaf, 1989; Chamberlayne et al., 1988; Campbell, 1986; Hollander & Davis, 1983). PCP, however, is more likely to be used by younger students in British Columbia (Chamberlayne et al., 1988). In Ontario, PCP use is highest among Grade 9 and Grade 11 students (Smart & Adlaf, 1989).

#### *4.3.4 Hallucinogen Problems*

The hallucinogens can produce a form of tolerance called tachyphylaxis. After only three or four consecutive administrations, users will not only no longer experience the original effects of the drug, but even an increase in dose cannot restore these effects. Physical dependence does not occur among users, although psychological dependence may be experienced. Fortunately, deaths from overdose have been infrequent. In addition, violence, homicide, suicide, and accidents are relatively uncommon among users.

#### *4.4 Speed*

##### *4.4.1 The Nature and Effects of Speed*

Use of speed (methamphetamine) began in the United States in the 1960s and quickly gained wide popularity. At that time, speed was relatively easy to obtain and often came from the legitimate pharmaceutical industry. Tighter controls, however, decreased availability. Speed users then turned to illicit laboratories. Street samples were often mixed with other substances. Marshman and Gibbins (1970) found that only 61.4% of samples they collected in Toronto contained any speed. Similarly, the Le Dain Commission (1973) found that among a sample of speed collected nationwide, only 73% contained any of the drug. In Canada, speed

use peaked in the early 1970s. By the mid to late 1970s, however, use had declined. In 1974, 119.3 pounds of methamphetamine were seized compared to only 5.8 pounds in 1977.

The effects of speed are similar to those of other stimulants (see cocaine, medical-stimulants). Many speed users embark on a "run" during which the drug is injected over a period of, in most cases, 3 to 5 days. During this period, users may feel happy, confident, and energetic, but to others they will appear overactive, garrulous, and boastful. A run is followed by a "crash" which is the result of withdrawal. Users may sleep for days and then wake up feeling depressed, sleepy, and extremely hungry.

#### *4.4.2 Current Use and Trends - (see Table 2.1)*

Levels of speed use among young people vary across Canada. In Ontario (Smart & Adlaf, 1989), 2.5% of students reported use in the past year compared to 6.8% in British Columbia (Chamberlayne et al., 1988) and 5.9% in New Brunswick (Campbell, 1986). Trend data are, unfortunately, available only for Ontario. Here we see that use of speed has remained stable since 1977 ranging from 2.7% in 1977 to 3.9% in 1983. Frequency of use has also remained consistent and low. In 1989, 61.9% of users reported using speed only once or twice in the past year.

#### *4.4.3 Characteristics of Users - (see Table 2.1)*

Males are generally and sometimes significantly more likely than females to use speed (Smart & Adlaf, 1989; Chamberlayne et al., 1988; Campbell, 1986). Differences in use also exist for grade/age. In all provinces, use is least likely among those in the lowest grades. In Ontario, use peaks among those in the middle grades after which it declines, sometimes significantly (Smart & Adlaf, 1989). In British Columbia and New Brunswick, however, use

seems to peak later and use does not decline among those in Grade 13 (Campbell, 1986; Chamberlayne et al., 1988). Speed use may also be related to lower grades, higher anxiety, and treatment for psychological problems (Fejer & Smart, 1972).

#### *4.4.4 Speed Problems*

Chronic use of speed often causes paranoia and lowered frustration tolerance and emotional control. This can lead to abusive, violent, or homicidal behaviour. In fact, deaths which have resulted from speed use are more often caused by the psychological effects of the drug, and especially by the violence it can produce, than by the toxic effects (Cox & Smart, 1972). Kalant and Kalant (1976), for example, found that of 26 speed-related deaths which occurred in Ontario in 1972-1973, 16 were due to suicide or homicide. Among the other dangerous effects of speed are infection and disease caused by injecting the drug and a poor lifestyle which leads to dehydration, malnutrition, weight loss, etc.

#### *4.5 Conclusion: Other Illicit Drugs*

Of those drugs covered in this section, hallucinogens, especially LSD, are the most prevalent. The least prevalent drug is heroin. No more than approximately 2% report having used heroin since 1976.

All illicit drugs are more prevalent among males. Age patterns are less consistent. Hallucinogens and speed tend to be more popular among older students. Inhalants, however, and to a lesser extent, heroin are more prevalent among younger students.

Apart from cannabis, illicit drugs are used by a small proportion of young people. In the past decade, rates of use have, in fact, remained stable or, in some cases, declined. These drugs are, however, of concern because of the serious problems which may result from their use.

## 5.0 PRESCRIPTION DRUGS: TRANQUILLIZERS, BARBITURATES AND STIMULANTS

Not all drug use among young people is illicit. Prescription drugs constitute an important part of total student drug use. Tranquillizers, stimulants, and barbiturates are of particular interest and concern since they are used by students for both medical and non-medical reasons.

### 5.1 Tranquillizers

#### 5.1.1 The Nature and Effects of Tranquillizers

Since their introduction in the mid-1950s, tranquilizers have become the most widely prescribed psychotherapeutic agents in the world. Tranquillizers act as anxiety reducers and depressants and are categorized as minor or major. The major tranquilizers are used to treat a variety of psychoses as well as severe neurotic agitation and anxiety. The minor tranquilizers, on the other hand, are used to treat common stressful conditions or sleep disturbances and are generally not effective in modifying psychotic symptoms.

The minor tranquilizers are very similar in effect to sedative/hypnotic drugs. Drugs in both categories can control anxiety, produce sedation and sleep, and control certain types of epileptic seizures. Some minor tranquilizers are effective in reducing the severity of symptoms associated with alcoholic withdrawal, and others are used to control muscle spasms and seizures.

In contrast, the major tranquilizers can have a calming effect on patients and may reduce both the fearfulness and terror experienced by individuals suffering from hallucinations and delusional thinking. Drugs in this category can also increase the alertness and activity in lethargic patients.

#### 5.1.2 Tranquillizer Problems

When taken in larger doses, certain tranquilizers can produce euphoria, motor incoordination, cognitive impairment, drowsiness, slurred speech, confusion, and memory impairment. In the case of overdose, tranquilizers can cause stupor, coma, severely depressed reflexes, cardiovascular shock, and sometimes death. In the case of minor tranquilizers, they can exacerbate the very depression they are meant to treat, resulting sometimes in suicide.

In addition to these possible side effects, minor tranquilizers can produce tolerance and both physical and psychological dependence. Individuals suffering from withdrawal may experience agitation, abdominal discomfort, sweating, tremors, unusual sensory perceptions, sleeping problems, and a loss of appetite. The major tranquilizers, on the other hand, produce tolerance only gradually, and it is unclear whether physical dependence can develop.

### 5.2 Barbiturates

#### 5.2.1 The Nature and Effects of Barbiturates

Like tranquilizers, barbiturates are depressants. They are, however pharmacologically distinct and have a different clinical application. In addition, they are more dangerous and have resulted in death. Barbiturates have a variety of uses and effects depending on both the type and dose. There are three main categories of barbiturates: 1) ultra-short acting, which are used as an anesthetic; 2) short or intermediate acting, which are used for daytime sedation or induction of sleep; and 3) long acting, used to control epileptic seizures and also for daytime sedation and induction of sleep.

Short-term use of barbiturates may produce the following effects: tranquillity; relaxation; euphoria; dizziness; lethargy; motor and cognitive impairment; sleep; impairment of speech, vision, and memory; nausea; vomiting; abdominal pain; drop in blood pressure and heart rate; and respiratory depression. Long-term use of barbiturates can produce effects similar to those of short-term use. In addition, normal sleep patterns may be disturbed.

#### 5.2.2 Barbiturate Problems

Very high doses can result in death due to respiratory arrest. Studies have shown that barbiturates were used in over half of drug suicides in the United States between 1973 and 1976 (Jacobs & Fehr, 1987). Tolerance to some of the effects of barbiturates can develop rapidly. Regular users may also become psychologically and/or physically dependent. Withdrawal symptoms can, in the case of regular users of high doses, be severe and may cause



convulsions or death. Less serious symptoms include anxiety, weakness, and insomnia.

### 5.3 Stimulants

#### 5.3.1 The Nature and Effects of Stimulants

Stimulants comprise a large number of drugs, including common substances like caffeine and nicotine, which increase activity in the central and autonomic nervous systems. Some are natural substances (cocaine, caffeine), while others, such as amphetamines, are entirely synthetic and relatively new.

There are a variety of medical problems for which stimulants are prescribed. Beginning in the 1920s and 1930s, amphetamines were used as a bronchodilator and a few years later for the treatment of narcolepsy and hyperactivity in children. By the mid-1940s, amphetamines were also prescribed to combat depression and to curb the appetite of obese individuals.

Although amphetamines started to receive criticism by the late 1940s, use flourished, peaking in the 1960s and early 1970s. A large number of users were women trying to control their weight. At that time, the very harmful effects of these drugs were brought to light. As a result, the prescribing of amphetamines was limited to only certain medical conditions such as narcolepsy, minimal brain dysfunction, epilepsy, and hypotensive states. In Canada, amphetamines are today mainly prescribed for attention deficit disorder (ADD). The prescribing of amphetamines for weight reduction has been largely discontinued.

The effects of taking low to moderate doses of stimulants are not universal and may vary according to the individual and according to the route of administration. While users may experience feelings of well-being and euphoria, others may feel irritable, anxious, tense, and nervous. Stimulants may also mask fatigue and suppress appetite. In addition, drugs in this category may cause increased heart rate and blood pressure.

#### 5.3.2 Stimulant Problems

Regular use of some stimulants at high doses can result in serious psychological consequences includ-

ing toxic psychosis. Stimulant use can also produce both tolerance and dependence. Withdrawal symptoms include feelings of depression which are sometimes severe enough to result in suicide. Interestingly, individuals who are prescribed stimulants for ADD or narcolepsy develop neither tolerance nor dependence.

#### 5.4 Prescription drugs: Current Use and Trends - (see Table 2.1)

According to the most recent data, prescription drug use among students is not insignificant in comparison to other drug use. In Ontario, stimulants, tranquillizers, and barbiturates used for medical reasons are all more prevalent than cocaine. In 1989, 3.3%, 3.1%, and 7.8% reported using stimulants, tranquillizers, and barbiturates respectively for medical reasons in the past year (Smart & Adlaf, 1989). Figures from British Columbia indicate a slightly higher prevalence among students. In 1987, 6% used tranquillizers, 11.3% used barbiturates, and 6.3% used stimulants by prescription. Among New Brunswick students prevalence is also slightly higher than in Ontario and, for two drugs, higher than British Columbia. Prescription tranquillizers were used by 5.4% while barbiturates by prescription were used by 13.2% and stimulants by 7.3% in 1986. American data on the use of non-medical substances among students are, unfortunately, unavailable. In addition, systematic trend data are available only for Ontario. Among Ontario students, medical use of tranquillizers, barbiturates, and stimulants show a weak downward trend. For tranquillizers, barbiturates, and stimulants, use in 1989 was approximately half of what it was in 1977 (3.1% versus 8.6%, 7.8% versus 14.2%, and 3.3 versus 6.6% respectively).

In terms of frequency, prescription use of tranquillizers, barbiturates, and stimulants among students is low. Over half of the users of each drug in Ontario used only once or twice in the prior year (72% of barbiturate users or 5.6% of the total sample, 69% of stimulant users or 2.3% of the total sample, and 63% of tranquillizer users or 2.2% of the total sample). In British Columbia, these figures are slightly larger. Among the total sample, 7.3% use prescription barbiturates, and 4.1% used prescription stimulants and tranquillizers one to two times in the past year. In New Brunswick, 68.8%, 69.4%, and 77.5% among the total sample used



prescription barbiturates, stimulants, and tranquilizers, respectively, only once or twice in the past year.

### *5.5 Prescription drugs: Characteristics of Users - (see Table 2.1)*

Estimates of use in Canada for prescription drugs show little variation between males and females, and between grades/ages. Nonetheless, in Ontario and New Brunswick, males are more likely than females to use prescription barbiturates and stimulants and females are more likely to use prescription tranquilizers. In the case of Ontario, this has been true since 1977. In British Columbia, males and females are equally likely to use prescription stimulants, while females are more likely to use prescription barbiturates and tranquilizers.

In Ontario and New Brunswick, younger students are the least likely to use prescription drugs. Use peaks in the middle years, after which there is a decline. Tranquillizers, however, are equally likely to be used by those in the intermediate and highest grades in New Brunswick and British Columbia (Campbell, 1986; Chamberlayne et al., 1988). In British Columbia younger students are the most likely to use stimulants (Chamberlayne et al., 1988).

### *5.6 Prescription drugs: Conclusion*

Although use of prescription drugs is low among the youth population, it is higher than use of several illicit drugs which have, nonetheless, received considerable attention. Prescription drugs are, however, used with the least frequency. Prescription drugs, therefore, probably present and carry the potential of fewer problems for youth than do alcohol and illicit drugs.

## 6.0 MULTIPLE DRUG USE

In order to get a complete picture of drug use among youths, it is important that we look at the prevalence and patterns of multiple drug use. Comprehensive data are available for Ontario (Smart & Adlaf, 1989) and Vancouver (Hollander & Davis, 1983), and more limited data are available for New Brunswick (Campbell, 1986) and Canada (Health and Welfare Canada, 1982). (See Table 2.2)

In fact, the majority of students use no drugs or only one drug. Most recent data from Ontario and Vancouver indicate that 33.2% and 29.2% respectively used no drug and that 22.9% and 38.9% respectively used only one drug — the most likely being alcohol. These figures represent an increase since 1977 in Ontario and since 1978 in Vancouver. Ontario data also indicate that only 9.6% have used more than three drugs in the past year. This is a drop since 1981 and 1985.

For the most part, multiple drug use involves two or three of the following drugs: alcohol, tobacco, and cannabis. In Ontario the most likely combination is alcohol and tobacco (7.2%), followed by all three (3.1%), and by alcohol and cannabis (1.6%). In Vancouver, multiple drug users are most likely to use all three drugs (10.2%), followed by alcohol and tobacco (8.6%), and alcohol and cannabis (3.4%).

In New Brunswick, the majority of students surveyed indicated that alcohol was the first drug they used (34%), followed by tobacco (27.2%) and cannabis (2.0%). Alcohol was also the drug most likely to be used second (29%) followed again by tobacco (13.6%) and cannabis (6.9%). Cannabis, however, was the drug most likely to be used thirdly (15.9%).

Apart from alcohol, tobacco, and cannabis, there is still a large group of others who report some other pattern of drug use (15.6% in Ontario in 1989; 18.6% in Vancouver in 1983). While this "other pattern" category may include single drug use, the majority reflect multiple drug use. Table 2.2 indicates, for example, that the large majority of cocaine and heroin users also use alcohol (90.4% and 88.2% respectively for Ontario, and 95.8% in Vancouver), tobacco (85.7% and 90% respectively for Ontario; 80.5% and 83.3% respectively for Vancouver), and cannabis (77.7% and 74.5% respectively for Ontario; 94% and 83.3% respectively for Vancouver).

Because multiple drug use may indicate a greater commitment to drug use which will continue into the future, and because it increases the chances for drug-related problems to occur, it is important that we continue to monitor multiple drug use among students.

## 7.0 CONCLUSION

After a period of high use in the 1970s, fewer young people today report using alcohol and drugs. All the evidence shows a decline in overall drug use in the past decade (Smart & Adlaf, 1989; Hollander & Davis, 1983; Desranleau, 1985; Johnston et al., 1988). Significant declines in alcohol and cannabis are particularly noteworthy because of their traditional popularity among youths. These declines are also important since youths who use alcohol and cannabis are more likely to use other drugs. Ontario data show, in fact, that fewer drugs are being used.

In addition, drug use among young people has remained, for the most part, at the experimental level. In general, drugs are used infrequently.

Despite declines and current low levels of use, however, there is growing public concern about the use of drugs among youths. It is important that we address this concern and continue to monitor drug use among young people. We must also keep in mind that substance use is subject to variation and may begin to increase.

### Trends in Annual<sup>1</sup> Drug Use

[illegible]

TABLE 2.1 - continued

| SUBSTANCE<br>Sample           | 77   | 78   | 79   | 80  | 81   | 82   | 83   | 84  | 85  | 86   | 87   | 89  |
|-------------------------------|------|------|------|-----|------|------|------|-----|-----|------|------|-----|
| <b>OTHER ILLICIT (cont'd)</b> |      |      |      |     |      |      |      |     |     |      |      |     |
| <b>Speed</b>                  |      |      |      |     |      |      |      |     |     |      |      |     |
| Ontario                       | 2.7  |      | 3.6  |     | 3.0  |      | 3.9  |     | 3.1 |      | 3.1  | 2.5 |
| British Columbia              |      |      |      |     |      |      |      |     |     |      | 1.7  |     |
| Vancouver                     |      | 1.3  |      |     |      | 1.4  |      |     |     |      |      |     |
| New Brunswick                 |      |      |      |     |      |      |      |     |     | 1.7  |      |     |
| U.S.A.                        | .8   | .8   | .5   | .5  | .5   | .6   | .6   | .5  | .6  | .5   | .5   |     |
| <b>LSD</b>                    |      |      |      |     |      |      |      |     |     |      |      |     |
| Ontario                       | 6.1  |      | 8.6  |     | 10.2 |      | 8.6  |     | 7.4 |      | 5.9  | 5.9 |
| British Columbia              |      |      |      |     |      |      |      |     |     | 8.8  |      |     |
| New Brunswick                 |      |      |      |     |      |      |      |     | 7.7 |      |      |     |
| U.S.A.                        | 5.5  | 6.3  | 6.6  | 6.5 | 6.5  | 6.1  | 5.4  | 4.7 | 4.4 | 4.5  | 5.2  |     |
| <b>PCP</b>                    |      |      |      |     |      |      |      |     |     |      |      |     |
| Ontario                       |      |      |      |     | 2.5  |      | 2.0  |     | 1.7 |      | 1.3  | 1.1 |
| British Columbia              |      |      |      |     |      |      |      |     |     |      | 1.9  |     |
| New Brunswick                 |      |      |      |     |      |      |      |     |     | 1.9  |      |     |
| U.S.A.                        |      |      | 7.0  | 4.4 | 3.2  | 2.2  | 2.6  | 2.3 | 2.9 | 2.4  | 1.3  |     |
| <b>Other Hallucinogens</b>    |      |      |      |     |      |      |      |     |     |      |      |     |
| Ontario                       | 4.3  |      | 5.3  |     | 4.7  |      | 6.0  |     | 4.8 |      | 4.5  | 4.3 |
| British Columbia              |      |      |      |     |      |      |      |     |     |      | 11.3 |     |
| New Brunswick                 |      |      |      |     |      |      |      |     |     | 5.2  |      |     |
| <b>Hallucinogens (All)</b>    |      |      |      |     |      |      |      |     |     |      |      |     |
| British Columbia              |      |      |      |     |      |      |      |     |     |      | 14.2 |     |
| Vancouver                     |      | 12.5 |      |     |      | 11.8 |      |     |     |      |      |     |
| U.S.A.                        | 8.8  | 9.6  | 9.9  | 9.3 | 9.0  | 8.1  | 7.3  | 6.5 | 6.3 | 6.0  | 6.4  |     |
| <b>PRESCRIPTION (MEDICAL)</b> |      |      |      |     |      |      |      |     |     |      |      |     |
| <b>Barbiturates</b>           |      |      |      |     |      |      |      |     |     |      |      |     |
| Ontario                       | 14.2 |      | 12.8 |     | 12.5 |      | 11.0 |     | 9.0 |      | 7.8  | 7.8 |
| British Columbia              |      |      |      |     |      |      |      |     |     |      | 11.3 |     |
| New Brunswick                 |      |      |      |     |      |      |      |     |     | 13.2 |      |     |
| <b>Stimulants</b>             |      |      |      |     |      |      |      |     |     |      |      |     |
| Ontario                       | 6.6  |      | 5.9  |     | 6.1  |      | 5.2  |     | 4.3 |      | 4.3  | 3.3 |
| British Columbia              |      |      |      |     |      |      |      |     |     |      | 6.3  |     |
| New Brunswick                 |      |      |      |     |      |      |      |     |     | 7.3  |      |     |
| <b>Tranquillizers</b>         |      |      |      |     |      |      |      |     |     |      |      |     |
| Ontario                       | 8.6  |      | 6.9  |     | 7.5  |      | 6.5  |     | 4.7 |      | 4.9  | 3.1 |
| British Columbia              |      |      |      |     |      |      |      |     |     |      | 6.0  |     |
| New Brunswick                 |      |      |      |     |      |      |      |     |     | 5.4  |      |     |

<sup>1</sup> All Vancouver data are for use in past 6 months.<sup>2</sup> Grades 7,9,11 and 13 (n=3252 to 4766).<sup>3</sup> Grades 8 to 12 (n=14,712).<sup>4</sup> Grades 8 to 12 (n=1701 to 1806).<sup>5</sup> CEGEP students (approx. n=1228 to 1283).<sup>6</sup> Grades 7 to 12 (n=6027).<sup>7</sup> National sample of youths (n=1544) ages 12 to 19 (Health and Welfare Canada).<sup>8</sup> National sample of youths (n=2333) aged 15 to 19 (Health and Welfare Canada).<sup>9</sup> High School Seniors (age 18) (n=12,317 to 15,707).<sup>10</sup> Marijuana only (Health and Welfare Canada).



**TABLE 2.2**  
**Percentage of Student Users/Non-users of a Drug Who Use Another Drug**

| Other Drug Used         | ALCOHOL<br>non- user<br>user | TOBACCO<br>non- user<br>user | CANNABIS<br>non- user<br>user | COCAINE<br>non- user<br>user | HEROIN<br>non- user<br>user |
|-------------------------|------------------------------|------------------------------|-------------------------------|------------------------------|-----------------------------|
| <b>ALCOHOL</b>          |                              |                              |                               |                              |                             |
| Ontario <sup>11</sup>   |                              | 57.1 87.9                    | 63.3 97.4                     | 68.2 90.4                    | 68.8 88.2                   |
| Vancouver <sup>12</sup> |                              | 43.6 90.6                    | 46.2 96.3                     | 59.3 95.8                    | 61.1 95.8                   |
| Canada <sup>13</sup>    |                              |                              | 39.0 93.0                     |                              |                             |
| <b>TOBACCO</b>          |                              |                              |                               |                              |                             |
| Ontario                 | 15.1 49.2                    |                              | 29.1 85.5                     | 36.8 85.7                    | 37.9 90.0                   |
| Vancouver               | 9.4 56.3                     |                              | 19.7 80.2                     | 35.0 80.5                    | 37.7 83.3                   |
| Canada <sup>14</sup>    |                              |                              | 12.0 62.0                     |                              |                             |
| <b>CANNABIS</b>         |                              |                              |                               |                              |                             |
| Ontario                 | 1.4 23.7                     | 4.0 37.3                     |                               | 14.4 77.7                    | 16.0 74.5                   |
| Vancouver               | 3.0 48.2                     | 9.9 64.6                     |                               | 26.1 94.0                    | 29.8 83.3                   |
| <b>COCAINE</b>          |                              |                              |                               |                              |                             |
| Ontario                 | 1.2 4.9                      | .9 8.2                       | 1.0 17.4                      |                              | 3.0 64.7                    |
| Vancouver               | .8 10.9                      | 2.2 14.8                     | .6 21.3                       |                              | 5.9 82.6                    |
| <b>HEROIN</b>           |                              |                              |                               |                              |                             |
| Ontario                 | .5 1.6                       | .2 2.8                       | .4 5.4                        | .4 20.8                      |                             |
| Vancouver               | .2 2.2                       | .4 3.1                       | .3 3.9                        | .3 16.4                      |                             |

<sup>11</sup> Use in past year<sup>12</sup> Use in past 6 months.<sup>13</sup> Use in past 30 days.<sup>14</sup> Daily smoking.

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**CHAPTER 3:**  
**PROVIDING TREATMENT TO YOUNG**  
**ALCOHOL AND DRUG USERS: A REVIEW**  
**OF THE LEGAL ISSUES**

**R. Solomon**  
**S. Usprich**



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## INTRODUCTION

This paper is intended to assist healthcare professionals in understanding the basic legal principles governing the assessment and treatment of young people with alcohol and drug problems. As with other professionals, those involved in healthcare are increasingly being sued,<sup>1</sup> and called upon in disciplinary hearings and other legal contexts to explain and justify their conduct.<sup>2</sup> There has been a parallel trend towards recognizing and protecting the legal rights of patients, especially those who are young.<sup>3</sup> Despite the impression that may have been created by the media, the situation in Canada is not as troubling as it is in the United States. Nevertheless, legal issues will continue to play a greater role in the working lives of all healthcare professionals.

In addition to the legal issues inherent in any treatment relationship, several complicating factors can arise in providing alcohol and drug treatment to young people. First, a sizeable percentage of such patients may have only reluctantly entered treatment pursuant to a probation order or at the insistence of school officials or parents. What effects do such pressures have on a healthcare professional's legal obligations to the patient? Second, although a patient may be under the provincial age of majority,<sup>4</sup> he or she may still be capable of giving a valid consent to treatment. Moreover, it may be difficult to determine in a specific case whether the particular underage patient is competent to consent to the proposed treatment. Assuming that a patient is capable of giving consent, how should a treatment professional respond to inquiries from parents, school officials, welfare workers, or police about the case? Third, alcohol and drug use frequently involves conduct that is not only illegal, but which may also endanger the patient and others. Does a

treatment professional have any legal obligation to inform the police of the criminal activities of his or her patients? Moreover, can a treatment professional be held civilly liable for failing to warn third parties of a patient's intention to injure or kill them?

These types of issues arise because alcohol and drug treatment for young people cuts across the healthcare, criminal justice, education, and child protection systems. Within the scope of this paper, we cannot undertake an exhaustive legal analysis of these systems and their possible effects on alcohol and drug treatment. Rather, we focus on the basic legal principles governing healthcare professionals and explain their special application to those involved in treating young people for alcohol and drug problems.

Even in terms of the general principles, it is not possible to review the relevant statutes and cases in every jurisdiction in Canada. Consequently, we provide an overview of the major principles in the text, but give detailed references in the endnotes. The reader should understand that the exact governing rules will vary from jurisdiction to jurisdiction to reflect the differences in provincial caselaw and statutes.

This paper is divided into three sections. In the first, we discuss the law governing consent to treatment. The second section contains a detailed discussion of the concepts of confidentiality and privilege, as well as a healthcare professional's disclosure, reporting, and recordkeeping obligations. In the final section, we change our approach and specifically address the potential criminal liability that caseworkers may have in treating young drug users.

## 1.0 CONSENT TO TREATMENT

### (a) *Introduction*

One of the hallmarks of our legal system is the importance that it attaches to individual rights and freedoms.<sup>5</sup> Perhaps of greatest concern has been the protection of the physical integrity of the individual.<sup>6</sup> Whether couched in terms of physical inviolability, self-determination, the right to be left alone, or privacy, the basic interest is the same: namely, the right of an individual to control his or her own body. It may be helpful to view this concept

as a double-edged sword. The law protects an individual's right to make such decisions, whether the decision is wise or foolish, or whether it enhances or undermines the individual's health. Nor does it make any difference whether the decision is based on a careful analysis of the risks and benefits, or on superstition, religious conviction, or an unfounded distrust of doctors and hospitals.

The law's concern for protecting the individual is clearly illustrated by the fact that virtually any

physical interference with another person may result in both criminal<sup>7</sup> and civil liability.<sup>8</sup> If the victim did not consent, the defendant will be held liable unless he or she can establish explicit legal authority to justify the interference. In these situations, however, healthcare professionals are rarely charged with a criminal offence.<sup>9</sup> Typically, the issue of consent arises in the context of whether a treatment professional has a valid defence to a civil action for the tort of battery.

The tort of battery may be defined as the intentional causing of a harmful or socially offensive physical contact with the person of another.<sup>10</sup> As a result of our legal system's concern with protecting the individual, this definition is interpreted broadly.<sup>11</sup> The mere touching of another is sufficient to give rise to liability; the victim need not suffer any physical injury.<sup>12</sup> In fact, a person can successfully sue for a battery even though he or she was not conscious of the physical contact when it occurred.<sup>13</sup>

Any surgical procedure, administration of drugs, or treatment that involves physical contact may constitute a battery. Once the patient establishes that there has been a physical contact, the burden of proof shifts to the treatment professional to establish a valid defence.<sup>14</sup> If the defendant cannot prove, on the balance of probability, that the patient consented, then the defendant will be held liable for all the consequences of the battery. In the vast majority of cases, the key issue is not whether there was a physical contact, but rather whether the treatment professional can establish the defence of consent.

The legal principles governing the defence of consent have developed almost exclusively from cases involving surgery and other physical interventions. Nevertheless, the tort of battery is also relevant to alcohol and drug treatment programs that include physical examinations, the taking of blood samples, the administration of drugs, or other physical contact. It is equally clear that alcohol and drug treatment that involves only the taking of a history, questionnaires, counselling, or similar non-physical interactions cannot give rise to a battery claim. However, the issue of consent may still be relevant in these situations.

### *(b) The General Principles of Consent to Treatment*

As a general rule, a healthcare professional must obtain consent to undertake any physical examination, test, procedure, surgery, or counselling.<sup>15</sup> The consent should be obtained in advance and cover not only the intervention, but also any related issues regarding the disclosure of information. The consent must relate to the specific procedure or treatment that is undertaken.<sup>16</sup> If the patient is competent to give a valid consent, then it is his or her consent alone that is required.<sup>17</sup> As we shall discuss, the consent of the next-of-kin is only relevant if the patient is incapable of giving consent. Even in these circumstances, there are limits to the validity of substitute consent.<sup>18</sup>

To be valid, a consent must be given "voluntarily," in the sense that the patient's decision is the product of his or her conscious mind.<sup>19</sup> This extremely broad legal definition of volition has important implications for alcohol and drug treatment. For example, patients who reluctantly consent to treatment because it is a term of probation, or because they have been threatened with being fired or expelled from school are nevertheless viewed as having voluntarily consented.

The consent must be based on a full and frank disclosure of the nature of the intervention and its risks. A patient must be put in the position of being able to make an informed decision about whether to enter treatment,<sup>20</sup> but need not be told of all the possible risks. Rather, the courts have held that patients must be informed of the general nature of the treatment and any "material risks" associated with it.<sup>21</sup> A material risk includes a low probability of a serious consequence, such as a 4% chance of death or a 10% chance of a stroke, or a high probability of a relatively minor consequence, such as a 35% chance of infection. In addition, healthcare professionals have an obligation to disclose even non-material risks that they know or ought to know would be of concern to the particular patient.<sup>22</sup> For example, a healthcare professional may not have to disclose to a school teacher that a proposed treatment poses a 5% risk of causing minor long-term stiffness in her fingers. However, this risk would have to be disclosed to a concert pianist.

Increasingly, the courts are requiring healthcare professionals to explain the proposed treatment and its risks in a broader context. This may include a discussion of alternative treatment, as well as the risks of leaving the condition untreated. For example in *Haughian v. Paine*,<sup>23</sup> the surgeon's liability was based in part on his failure to explain the alternative non-surgical treatment and the risks of leaving the ailment untreated. In the court's words, "One cannot make an informed decision to undertake a risk without knowing the alternatives to undergoing the risk."<sup>24</sup>

A patient may choose to rely on the healthcare professional's judgment, and decide to forgo being informed of the risks. However, the decision not to be fully informed is the patient's and must be expressly communicated to the healthcare professional. Healthcare professionals are also required to answer fully and honestly all of a patient's questions, even if they relate to minor risks or relatively inconsequential aspects of the procedure.<sup>25</sup>

Healthcare professionals who do not meet these standards of disclosure are in breach of their duty. However, the patient must also establish that this failure to inform caused or contributed to his or her injuries.<sup>26</sup> In effect, patients must prove that they would not have proceeded with the treatment if they had known of the risks.<sup>27</sup>

A patient may give consent implicitly or explicitly. The fact that a patient comes for treatment provides at least some measure of implied consent.<sup>28</sup> However, if a patient has expressly prohibited a treatment or procedure, consent to it cannot be implied. This principle is illustrated by the case of *Mulloy v. Hop Sang*.<sup>29</sup> The patient, whose hand had been badly mangled in a car accident, asked the doctor to "fix up his hand" but not amputate it because he wanted it looked after in his home city. The doctor replied that he would be governed by the conditions he found after the hand could be examined more fully under anesthetic. The patient did not reply. During the operation, the doctor decided to amputate the hand because it could not be saved. The court agreed that the hand could not have been saved and held that the amputation was skilfully performed. Nevertheless, the court held the doctor liable in battery for the unauthorized amputation. The patient's express prohibition had negated any implied consent the doctor might otherwise have had.

Patients may seek alcohol and drug treatment, and yet expressly limit the scope of their consent. A healthcare professional may refuse to treat a patient if these limitations are unreasonable. However, a healthcare professional cannot ignore a patient's express prohibitions or override his or her denial of consent.

### (c) *Exceptions to the General Requirement of Consent*

The courts have relaxed the strict requirements of consent in three situations. First, in an unforeseen medical emergency where it is impossible to obtain consent, a healthcare professional may operate without consent to preserve the patient's health or life. This right is granted to healthcare professionals in order to save lives. It is on this basis that emergency room staff are permitted to operate on unconscious victims of car accidents. Similarly, a surgeon in the course of an operation may deal with unforeseen conditions that threaten the patient's health or life.<sup>30</sup> Although the next-of-kin may be consulted, their consent is not required.

Since this right arises only in emergency situations, it will not be applicable in a typical alcohol or drug treatment relationship. However, it may be relevant in treating unconscious, extremely intoxicated, "high," or otherwise incapacitated patients suffering from alcohol or drug overdoses. Similarly, doctors may use this power to treat accident victims who are incapable of giving a valid consent because of the combined effects of their injuries and alcohol or drug consumption.

The second exception to the consent requirement involves patients who have given a general consent to a course of therapy, treatment program, or operation. In such situations, a patient will be viewed as implicitly consenting to any subordinate tests, procedures, or interventions that are necessarily incidental to the broader course of treatment.<sup>31</sup>

However, this implied consent is negated if the patient objects. While it may not be legally necessary, it is prudent to obtain a specific consent for any subordinate procedure that poses significant risks or involves sexually or emotionally sensitive issues.

Third, the Canadian courts have held that healthcare professionals have a right to withhold information if



its disclosure would undermine the patient's morale or discourage him or her from having needed medical treatment.<sup>32</sup> However, this "therapeutic privilege" to withhold information appears to have been significantly limited in recent years. It now appears that patients must always be informed of the basic nature and risks of a procedure.<sup>33</sup> Nevertheless, healthcare professionals do have some discretion in the way that they inform a patient of the risks, the technical matters that they discuss, and the emphasis they place on the relative risks of undergoing versus not undergoing the treatment.<sup>34</sup>

While it is important to encourage young people to enter alcohol or drug treatment, staff cannot withhold information about the treatment or its risks, or exaggerate its benefits. Healthcare professionals may express their views about the benefits of treatment in strong language, but they may not mislead patients.

#### *(d) Consent Forms and the Burden of proof*

A patient may give consent orally or in writing, unless a statute provides otherwise. For example, some provinces have regulations that, except in an emergency, prohibit surgical procedures from being performed in public hospitals without a written consent from the patient.<sup>35</sup> In the case of a routine office visit, it is not necessary to obtain a written consent. The patient's presence provides implied consent, and written documentation of the consent is bothersome for both the patient and the healthcare professional.

Nevertheless, there are situations in which it may be wise to obtain a written consent to treatment. For example, it is prudent to seek a written consent for treatments that involve significant risks, are complex or innovative, or entail potentially sensitive legal, sexual, or emotional issues. A written consent is also advisable in undertaking treatment that involves an ongoing relationship or series of interactions over a period of time. The need for a written consent will also increase if a patient is immature, unstable, rash, or lacks good judgment. Based on several of these criteria, it is advisable to seek a written consent from young patients prior to undertaking alcohol or drug treatment.

It should be emphasized that a signed consent form does not provide ironclad proof of valid consent.

Rather, the courts will view the signed form as providing some evidence of consent. The key issue is whether the patient understood the basic nature of the procedures and their risks, and consented to them. A healthcare professional may attempt to inform the patient by giving an oral explanation or by providing a written explanation in a consent form. However, in either case, the fact that the patient consented will be of little value if the explanation was phrased in technical language that the patient did not understand.<sup>36</sup>

A signed consent form is only as good as the information that it contains and the circumstances in which it is presented to the patient. A consent form that a patient signs when intoxicated, "high," drugged, or in severe pain, may well be challenged.<sup>37</sup> Similar problems arise if the consent form is written in general terms that do not specifically identify the nature of the procedures or their risks. Nor will the form provide much protection if it was presented to the patient as a mere formality or given to the patient in circumstances in which there was no opportunity to read it.<sup>38</sup>

Although the issue has generated academic debate, the courts have held that healthcare professionals have the burden of proving consent on the balance of probability.<sup>39</sup> Consequently, if it is unclear whether the patient consented, the court will hold that there was no consent. Given the burden of proof and the nature of alcohol and drug treatment for youth, staff should obtain a patient's written consent at the outset of the relationship. The consent form should be written in clear, simple language and specifically discuss the nature of the proposed treatments and their risks. As we shall discuss in the next section, it would also be advisable to explain in the consent form the procedures used for recordkeeping and maintaining confidentiality.

#### *(e) Competency to Give a Valid Consent*

##### *(i) Introduction*

In order for a consent to be valid, it must be given by a patient who is legally competent to give it. The general test of competency is whether the patient has the ability to understand the nature of the proposed treatment and its risks. This is a very low threshold test which is applied on a case-by-case basis.<sup>40</sup> As stated earlier, if the patient is competent to give



consent, then it is his or her consent alone that is relevant. Indeed, it would be inappropriate even to discuss a patient's treatment with the next-of-kin without the patient's consent, because this would involve a breach of confidence. Thus, the assessment of a patient's competence to consent is a preliminary issue of critical importance.

Although the situation may not arise often, the same principles apply in assessing the validity of a patient's refusal to consent. For example, a patient who is clearly intoxicated and suffering from shock due to a car accident may not have the legal capacity to give either a valid consent to treatment or a valid refusal. In this situation, a substitute consent would be required unless the circumstances constitute a medical emergency. In that case, a healthcare professional would be permitted to intervene without consent to save the life or preserve the health of the patient.<sup>41</sup>

## (ii) Minors

**General Principles:** The age of majority varies across Canada and there is no single recognized age of consent for medical treatment. In the absence of a statute to the contrary, the test of competency is the same whether the patient is a minor or an adult. Generally, the courts will assess whether the patient is capable of understanding the nature of the proposed procedure and its risks. If a minor meets this test, then his or her consent is valid and parental consent is not necessary. In some cases, the courts have relied upon indicia of independence as a guide to a minor's competency.<sup>42</sup>

The general principles governing a minor's capacity to give consent to treatment are illustrated in the following three cases.<sup>43</sup> In *Johnston v. Wellesley Hospital*,<sup>44</sup> the plaintiff sued the defendant for battery, claiming that the consent he had given to treatment was invalid because he was a minor. At the time, the age of majority in Ontario was 21 and the plaintiff was 20. The court held that minors could give a valid consent to medical treatment, without parental involvement, if they were able to understand the nature of the procedure and its risks. Based on the facts, the judge concluded that the plaintiff was competent to consent and had in fact consented to the treatment. Consequently, the court upheld the validity of the plaintiff's consent and dismissed the battery action.

In *The Children's Aid Society of Metropolitan Toronto v. LKD*,<sup>45</sup> the court upheld the decision of a 12-year-old Jehovah's Witness to refuse a blood transfusion and chemotherapy as treatment for her acute leukemia. The judge emphasized that the girl was wise and mature beyond her years and fully aware of the consequences. She had decided that she would prefer to die peacefully, rather than tolerate the side effects of the chemotherapy or accept blood transfusions that violated her deeply held religious convictions. In the judge's words, "L's position is now and has been from the day she saw a documentary on the disease that she doesn't want any part of that therapy, not only because of her religious beliefs as such, but because she doesn't want to go through that hell!"

The judge concluded that the girl was not a child in need of protection and refused the Society's application to compel her to have a blood transfusion. Clearly, the judge was influenced by the fact that the parents' and child's wishes were the same and that the dangers of the treatment were equal to those posed by the disease.<sup>46</sup>

The plaintiffs in *C. v. Wren*<sup>47</sup> sought an injunction to prohibit a doctor from performing an abortion on their 16-year-old daughter. As was then required by the *Criminal Code*, the daughter had obtained approval from a therapeutic abortion committee. The court sympathized with both the parents and their daughter in this "painful dispute" over the ethics of the proposed abortion. However, the legal issue was clear — could this 16-year-old girl give a valid consent to a therapeutic abortion? The court concluded that the daughter understood the nature of the procedure and its risks, and therefore was competent to give a valid consent. Consequently, the parents' application for an injunction was dismissed. In reaching its conclusion, the court quoted an English decision that aptly summarizes the law:

...the parental right to determine whether or not their minor child below the age of 16 will have a medical treatment terminates if and when the child achieves a sufficient understanding and intelligence to enable him or her to understand fully what is proposed.<sup>48</sup>

**Statutory Age of Consent Provisions:** As previously indicated, the common law's flexible test of competency applies unless a statute provides otherwise. In any one jurisdiction, there may be several

statutes that impose specific age requirements for consent to treatment in particular circumstances. Since we cannot review all the provisions from every province,<sup>49</sup> we focus on the Ontario legislation to illustrate the types of statutory age provisions.

In Ontario, there are three statutory exceptions to the common law test of competency that are potentially relevant to alcohol and drug treatment.<sup>50</sup> First, Regulation 518 under the Ontario *Public Hospitals Act*<sup>51</sup> prohibits any surgical procedure, except in an emergency, unless the patient has provided a signed consent.<sup>52</sup> If the patient is unmarried and under 16, the consent form must be signed by the patient's parents or guardian.<sup>53</sup> For example, a 15-year-old boy, who came to a public hospital after being injured in an alcohol-related accident, would require his parents' consent for stitches to close a minor cut. This provision is limited to public hospitals, and thus would have no impact on a physician in his or her private office.

Second, the Ontario *Mental Health Act*<sup>54</sup> in effect establishes 16 as the age of consent for treatment. A person under 16 is presumed to be "not mentally competent to consent," but this presumption is subject to review.<sup>55</sup> The Act sets out elaborate provisions to obtain substitute consent if the patient is not competent to consent.<sup>56</sup> These statutory provisions would apply to an outpatient drug treatment program in a mental health facility, but not to an identical program operating out of a public hospital.<sup>57</sup>

Third, the Ontario Child and Family Services Act, 1984 (CFSA) contains perhaps the most relevant and complex statutory age provisions.<sup>58</sup> They apply to any "agencies," "societies," "licensees," and "persons" funded by the Ministry of Community and Social Services to provide "child development," "child treatment," "child welfare," "community support," "young offenders" and other "specified" services.<sup>59</sup> However, the CFSA apparently does not apply to any treatment provided pursuant to the Public Hospitals Act, Mental Health Act, or Health Disciplines Act. Consequently, a social worker providing alcohol and drug treatment in an outpatient clinic of a public hospital would be governed by the common law's flexible test of capacity. In contrast, the same social worker providing identical treatment in an agency funded by the Ministry of Community

and Social Services would be subject to the consent provisions of the CFSA.

The complexity does not end even after one has determined that the *Act* applies. In a series of complicated provisions, the *Act* establishes different age requirements for consent depending upon the type of treatment. Services may be provided to a child 16 years of age or older solely on that child's consent.<sup>60</sup> For children under 16, parental consent (or that of the Children's Aid Society if it has custody of the child) is required for residential services.<sup>61</sup> However, counselling services can be provided to a child who is 12 or older based solely on that child's consent. A child under 16 must, however, be advised of the desirability of involving his or her parents.<sup>62</sup> The *Act* also sets out a statutory test of capacity for determining the validity of a child's consent.<sup>63</sup>

**Summary:** Unless a statute provides otherwise, minors can give a valid consent to alcohol and drug treatment. The key issue is whether they are capable of understanding the nature of the proposed treatment and its risks. If the child is capable, then the consent of the parents or guardian is not required. As in Ontario, there may be several provincial statutes that impose age-of-consent requirements for certain types of treatment in specific situations. In the end result, the age of consent is governed by a complex tangle of common law and statutory provisions.<sup>64</sup>

### *(iii) Prisoners, Parolees, and Suspects*

The general common law principles governing competency to consent also apply to people in custody or under other legal restraints, unless there is statutory authority to the contrary.<sup>65</sup> If the person is competent,<sup>66</sup> his or her consent to treatment must be obtained.<sup>67</sup> The fact that the patient's refusal constitutes a violation of his or her probation or parole does not alter the obligation to accept the patient's decision.

A healthcare professional should refuse a police request to take blood samples<sup>68</sup> or conduct intrusive tests on unwilling or unconscious suspects.<sup>69</sup> This situation must be distinguished from medical emergencies in which it is impossible to obtain the suspect's consent. In these situations, the staff may perform any medical procedures that are needed to

save the life or preserve the health of the suspect.<sup>70</sup> Nevertheless, any blood samples or test results should not be given to the police.<sup>71</sup> Rather, the police should obtain a search warrant authorizing the seizure of that evidence.<sup>72</sup>

In 1985, Parliament introduced a special warrant that authorizes the taking of blood from unconscious drinking and driving suspects in limited circumstances.<sup>73</sup> The police can obtain this warrant by telephone if necessary. However, they must in all cases have reasonable grounds to believe that the suspect is incapable of consenting to a blood test and has committed a drinking and driving offence within the previous two hours. These warrants are further limited to cases in which the suspect has been involved in a fatal or personal injury accident.<sup>74</sup> Moreover, even if an officer obtains a warrant, the blood test can only be taken by or under the supervision of a doctor who is satisfied that the procedure will not endanger the suspect's life or health.<sup>75</sup> A healthcare professional acting pursuant to this warrant is protected from both civil and criminal liability.<sup>76</sup> Nevertheless, the legislation permits healthcare professionals to refuse to participate in the procedure.<sup>77</sup>

#### *(iv) The Mentally Ill and Mentally Incapacitated*

In the absence of a statutory provision to the contrary,<sup>78</sup> the general common law test of competency is used to determine whether those who are mentally ill, senile, "high," or intoxicated can give a valid consent to treatment.<sup>79</sup> Consequently, treatment professionals must assess the capacity of each of these patients relative to the specific procedures or treatment. While easy to state, the principle may be extremely difficult to apply in many situations. For example, one need only consider the cases of an occasionally disoriented alcoholic, a sedated patient,<sup>80</sup> or a patient in shock.<sup>81</sup>

#### *(f) Substitute consent to Treatment*

The issue of substitute or next-of-kin consent arises only if the patient is not competent to give or withhold consent. In such circumstances, the law permits the patient's parents, guardian, or next-of-kin to make treatment decisions on the patient's behalf.<sup>82</sup> There may, however, be problems locating a parent, guardian, or next-of-kin to exercise this

authority. This may well occur in cases of skid-row alcoholics or street children. Additional difficulties may arise if the parents or next-of-kin disagree on the appropriate course of action.<sup>83</sup>

The power to exercise substitute consent is not absolute. Since it is based on a relationship of trust, the decision to give or withhold such consent must be made in the patient's best interests.<sup>84</sup> It is on this basis that courts have struck down refusals by Jehovah's Witnesses to consent to blood transfusions for their children.<sup>85</sup> Similarly, a court could invalidate a parental decision to refuse alcohol or drug treatment for their incompetent child, if the refusal was not in the child's best interests. The court could order that the child be given treatment or that the child be made a ward of the provincial child welfare agency.<sup>86</sup> In turn, the agency would ensure that the child received the needed treatment.

#### *(g) Factors That Invalidate Consent*

Once it is established that a patient consented, it must be determined if there is any factor that would vitiate that consent. There are basically three factors that will have this effect: mistake, duress (coercion), and deceit (fraud). If the consent is negated, the treatment professional's legal position is the same as if there had been no consent.

The fact that the patient consented to treatment under a mistaken belief will not invalidate the consent, unless the treatment professional was responsible for the patient's misapprehension.<sup>87</sup> American authorities suggest that the consent may also be invalid if the healthcare professional was aware of the patient's mistaken belief.<sup>88</sup> This issue may arise if a doctor or counsellor inadvertently overstates the benefits of the treatment, or fails to answer adequately one of the patient's questions. While it may be important to encourage patients to have beneficial treatment, care must be taken not to overstate the case for treatment or understate its risks.

Consent that is obtained as a result of duress is invalid. However, the courts have defined duress as an immediate threat of physical force.<sup>89</sup> As long as the courts use this restrictive definition, the issue of duress is unlikely to arise in a typical alcohol or drug treatment situation. The fact that a patient only reluctantly consents to avoid being thrown out of the house, expelled from school, or charged with breach



of probation does not constitute duress. In contrast, the issue of duress would arise if a patient consented because of a threat of being physically restrained or drugged.

A patient's consent will also be invalid if it was obtained as a result of deceit.<sup>90</sup> This issue arises if a treatment professional **deliberately** overstates the benefits of treatment or understates its risks. Similarly, staff should not pass off experimental treatment as standard treatment, or mislead research subjects into believing that they are receiving an active drug when they are actually being given a placebo.

### *(h) Conclusion*

Subject to a few limited exceptions, treatment relationships in our legal system are based on consent. Although consent issues usually arise in relation to medical procedures, they apply equally to psychological assessments, treatments, and counselling. Therefore, prior to initiating alcohol or drug treatment, staff should ensure that they have obtained a valid consent. The following checklist is intended to assist healthcare professionals in this task:

- ☐ Is this an emergency situation in which the treatment professional is authorized to intervene without consent?
- ☐ If not, has the patient explicitly consented to the proposed treatment?
- ☐ If not, has the patient implicitly consented?
- ☐ Is the consent valid in the sense that it is based on a full and frank disclosure of the nature of the treatment and its risks?
- ☐ Is there adequate proof of consent? Is this a situation in which the consent should be in writing?
- ☐ Is the consent valid in that the patient has the capacity to understand the nature of the procedure and its risks?
- ☐ If the patient is incompetent, has a valid substitute consent been given?
- ☐ Are there any factors that will invalidate the consent (i.e., mistake, duress, or deceit)?

## 2.0 CONFIDENTIALITY, DISCLOSURE, AND RECORDKEEPING

### *(a) Introduction*

It is hardly a revelation to state that there is a general obligation on professionals to hold all patient or client information in the strictest confidence. However, for those involved in treating young people with alcohol and drug problems, this burden is particularly acute. First, the information received during treatment is likely to be especially sensitive. It may relate to illegal conduct, sexual activities, and emotional difficulties. Second, even under the best of circumstances, the generation gap poses difficulty in establishing the necessary relationship of trust and confidence. Once confidentiality has been breached, the treatment relationship may be irreparably damaged. Third, the patient's youth imposes a special responsibility on a healthcare professional to safeguard the patient's interests and confidences. Finally, parents, school authorities, and other officials — all with legitimate interests in the patient's welfare — may pressure the staff for

information. In the absence of the patient's consent or a legal obligation to disclose, the professional must resist those pressures.

This section begins with a discussion of confidentiality and the various legal repercussions that may flow from breaching it. We next distinguish confidentiality from the technical legal term "privilege." While almost all information that healthcare professionals obtain in the course of treatment is confidential, little, if any, is privileged.

However, the real complexity is not in determining what information is confidential, but in understanding when it is permissible to disclose confidential information. Accordingly, we discuss the circumstances in which patient information may be disclosed, as well as those situations in which the professional is legally required to report information. Finally, we examine the professional's responsibility for keeping proper records. The im-



portance of maintaining adequate patient records cannot be overemphasized, if for no other reason than their critical evidentiary role in litigation.

Most of the specific disclosure, reporting, and recordkeeping obligations are dictated by statutes. While there are numerous situations in which there are no clear statutory requirements, there are others in which more than one set of statutory provisions may apply.<sup>91</sup> Aside from problems with these gaps and overlaps, it may be extremely difficult even to find the governing provisions.

There are a multitude of statute-based requirements that must be considered. While some are in federal legislation, the bulk are contained in provincial statutes. However, even if one finds the appropriate Act, it may provide little guidance. The relevant rules may be in the regulations made pursuant to the Act. In turn, the regulations may delegate responsibility for defining the confidentiality, disclosure, and recordkeeping obligations to an administrative agency, in which case the governing rules will be found in that agency's by-laws or policy directives.<sup>92</sup>

Even under the optimistic assumption that one can find the governing rules, it may be difficult to interpret and apply them. All of these different sets of rules developed independently, often on a piecemeal basis. When one puts them together, the result is statutory chaos.

The applicable statutory requirements may vary depending on the professional affiliation of the person providing the treatment and where it takes place. For example, different rules may apply if the location is a hospital, private clinic, school, or private agency. Given the broad spectrum of professionals engaged in youth counselling and the variety of circumstances in which it takes place, it is impractical to describe all the statutory provisions that may be relevant. We do not attempt to do so. Rather, we examine the general principles and their specific application to common alcohol and drug treatment situations.

### (b) Confidentiality

The term “confidentiality” has several meanings in common usage. However, when used in a legal context, the term refers to the obligation not to

disclose voluntarily any information that has been received in confidence.<sup>93</sup> An obligation of confidentiality may be imposed on an individual by statute,<sup>94</sup> or an individual may assume it by promising to maintain confidentiality. For example, a counsellor may advise a patient to speak freely because any information will be held in confidence. Conversely, a patient may indicate that information is being given “in confidence.” However, even in the absence of an explicit statement, it is simply assumed in most professional relationships — such as those involving healthcare professionals, lawyers, and accountants — that all patient or client information is confidential.<sup>95</sup> Most professions incorporate this principle into their governing ethical codes.<sup>96</sup>

Accordingly, healthcare professionals have a legal and ethical obligation to ensure that all information obtained during treatment remains confidential. This applies to information about the patient and information that the patient gives about others. As a general rule, healthcare professionals should not reveal any record or information to anyone, unless they are sure that they have the proper authority to do so. Depending on the circumstances, such authority may be based on the patient's consent,<sup>97</sup> common law principles, or statute. As we shall discuss, there are situations in which healthcare professionals may be legally compelled to disclose information. Since such disclosures are mandated by law and not made willingly, they do not constitute a breach of confidentiality.

A breach of confidentiality can lead to penal, civil or professional consequences. Many of the confidentiality obligations of healthcare professionals are defined by provincial legislation. For example, Ontario's *Mental Health Act* stipulates that, subject to specified exceptions, “no person shall disclose, transmit or examine” a patient's clinical record.<sup>98</sup> A violation of this provision constitutes a provincial offence, punishable by a fine of up to \$10,000.<sup>99</sup> The *Hospitals Act of Nova Scotia* states that the records of a hospital concerning a particular patient are confidential and cannot be made available without the patient's consent.<sup>100</sup> Furthermore, the federal *Young Offenders Act*<sup>101</sup> (YOA) may limit disclosures. For example, an individual who reveals the name of, or a means of identifying, a young offender may unwittingly violate the privacy

provisions of the *YOA*,<sup>102</sup> and thus may be subject to criminal prosecution.

In addition to possible prosecution, a person who breaches a confidence may face civil liability. A patient whose confidence was breached may be able to recover damages in a civil suit for breach of contract.<sup>103</sup> The patient may also have grounds to sue for negligence, defamation,<sup>104</sup> or the emerging tort of breach of confidence.<sup>105</sup>

In the case of a professional, the patient may initiate disciplinary proceedings for a breach of confidence. The ethical codes,<sup>106</sup> and in many cases the legislation,<sup>107</sup> governing most professionals provides that the wrongful disclosure of confidential information constitutes professional misconduct, and thus grounds for disciplinary proceedings.

### (c) *Privilege*

The legal term “privilege” means the right to refuse to disclose confidential information when giving testimony, or when faced with a subpoena ordering the production of documents.<sup>108</sup> As a rule, persons called as witnesses in court or before other legal tribunals must answer all relevant questions put to them. Privilege is an exception to that general rule. In the absence of privilege, a person who refuses to answer questions when required to do so may be found in contempt of court.

Traditionally, the only professional relationship to which privilege applied was that between solicitors and their clients.<sup>109</sup> The solicitor-client privilege is predicated on the view that the operation of our judicial system requires that clients speak freely with their lawyers, and this will only occur if such communications remain confidential. Although priests, journalists, and healthcare professionals have claimed a comparable need for confidentiality, similar protection has rarely been granted.<sup>110</sup>

Despite frequent recommendations that privilege be extended,<sup>111</sup> the legislature and the courts have been reluctant to create further restrictions on the evidence available for trials. However, Quebec legislation provides that any information revealed to physicians in their professional capacity is privileged.<sup>112</sup> This privilege has been limited to civil trials and thus cannot be claimed by a physician testifying at a criminal trial.<sup>113</sup>

Even where legislation purports to provide privilege, the courts may interpret it narrowly on the basis that the interests of justice require admission of all relevant information.<sup>114</sup> For example, Ontario’s *Education Act* states that a student record is “privileged” and not admissible in legal proceedings.<sup>115</sup> However, in a case involving a 16-year-old student charged with a brutal murder, the court ruled that the record must be admitted and that the school officials must testify.<sup>116</sup>

In 1976, the Supreme Court of Canada recognized a new general category of privileged information,<sup>117</sup> but the requirements are stringent. To qualify as privileged, the information must meet all of the following conditions:

- (1) it was given in confidence;
- (2) confidentiality is necessary to the relationship;
- (3) the relationship is one which society believes should be rigorously fostered;
- (4) the injury to the relationship from disclosure of the information is greater than the benefit of having a case decided on the basis of complete information.

Communications made in the course of most counselling relationships satisfy the first three requirements. First, patients expect that the information they give to healthcare professionals will be kept confidential. Second, successful treatment is said to depend upon maintaining confidentiality between the patient and the counsellor. Third, society certainly has an interest in promoting successful treatment.

However, the fourth criterion has been most difficult to satisfy. If the information has a bearing on the case, the courts have required disclosure, ruling that the interests of justice outweigh the importance of maintaining confidentiality. For example, in a recent case involving a man charged with sexually molesting his stepdaughters, a psychiatrist was required to divulge statements that the accused had made during a family counselling session.<sup>118</sup>

While not tantamount to formal legal privilege, the courts have occasionally given certain professionals the practical benefits of privilege. A court can do

this by simply declining to hold a witness in contempt when the witness refuses to disclose confidential information.<sup>119</sup> However, this occurs rarely and is usually confined to priest-penitent or psychiatrist-patient relationships.<sup>120</sup>

In summary, while almost all information that healthcare professionals obtain in the course of alcohol and drug treatment is confidential, little is privileged. Consequently, staff would be well advised to adopt a working assumption that they and their records may be examined in court some day. This sobering thought should encourage staff to maintain complete records and adopt a professional tone in their preparation.

#### (d) *Disclosure of Patient Information*

Healthcare professionals must understand the circumstances in which they are authorized to disclose patient information. Treatment records do not belong to the patient. Rather, they are the property of the agency and the professional providing the treatment.<sup>121</sup> Nevertheless, patients will usually be able to obtain access.

Various provincial statutes specify who may release information to whom and under what circumstances. The rules governing the disclosure of patient information are complex and vary among these statutes. Interpreting these provisions can be a problem, but often the first difficulty is deciding which act is applicable. In some situations more than one statute applies,<sup>122</sup> whereas in other situations there may be no governing statute.

Some of this confusion may be alleviated by provincial freedom of information and protection of privacy legislation. Typically, these statutes provide a single comprehensive scheme governing confidential information and its disclosure. Such legislation is in force in Manitoba, New Brunswick, Newfoundland, and Nova Scotia<sup>123</sup> and will come into force in Ontario as of January 1, 1991.<sup>124</sup>

##### (i) *Disclosure Dictated by Statute*

Some statutory provisions give the patient a right to the information contained in his or her own records. For example, the public hospitals legislation in Alberta, Ontario, and Saskatchewan stipulates that a person with a signed request from a patient may

be given access to that patient's medical record.<sup>125</sup> Presumably, this provision would permit a patient to request access to his or her own record. However, the use of the word "may" indicates that disclosure is discretionary, not mandatory. The Alberta and Ontario mental health legislation provides that a patient is generally entitled to examine his or her own clinical record.<sup>126</sup> As well, subject to some restrictions, the record may be disclosed to others at the request of the patient.<sup>127</sup>

In Ontario, the record provisions of the *Child and Family Services Act, 1984* (CFSA) specifically exclude patient records that are governed by the *Health Disciplines Act*, *Public Hospitals Act*, or *Mental Health Act*.<sup>128</sup> Nevertheless, the CFSA applies to a broad range of agencies providing counselling or other treatment services that are funded by the Ministry of Community and Social Services.<sup>129</sup> Under the CFSA, a person 12 years or older generally has the right to access his or her own records.<sup>130</sup> As well, parents can access the records of their children under 16, unless the record relates to counselling.<sup>131</sup> Counselling records of a child 12 or older usually cannot be disclosed without the child's consent.<sup>132</sup> Once a child reaches 16, his or her records can generally be disclosed only with that child's consent.<sup>133</sup>

The Manitoba *Child and Family Services Act* stipulates that all records are confidential,<sup>134</sup> although adults will be given access to their own records and those of their children.<sup>135</sup> Pursuant to the Alberta *Child Welfare Act*, records must be kept for 100 years<sup>136</sup> and disclosure is discretionary.<sup>137</sup>

However, ascertaining the technical requirements of the appropriate statutory provisions may be an academic exercise. If a legal action is commenced, the rules of civil procedure may enable the patient to demand a copy of virtually all hospital and office records.<sup>138</sup>

##### (ii) *Disclosure with the Patient's Consent*

In the absence of a statutory provision to the contrary, a healthcare professional cannot, as a general rule, voluntarily disclose any patient information without the patient's consent — not even to family members, employers, probation officers, or the police.<sup>139</sup> Particularly in alcohol and drug treatment, the mere fact that a person is a patient is highly



sensitive. Consequently, even simple inquiries, such as whether a person is a patient or has attended treatment, are best left unanswered with an explanation that all patient information is confidential. Clearly, in addition to professional expertise, healthcare professionals require diplomatic skills.

Even if the patient was examined at the request of a third party, such as a parent, the healthcare professional must obtain the patient's consent before disclosing any information to the third party.<sup>140</sup> If the counsellor thinks that the patient's family should be involved, he or she should request the patient's permission to involve them. Occasionally, there may be situations in which the patient's consent to disclosure is implied, such as when an examination has been required as a prerequisite to obtaining employment or insurance. However, it is safest to obtain an explicit consent in all cases, especially when the information relates to legal, sexual, emotional, or other sensitive matters.

There is implied consent to share patient information with other staff in order to provide proper treatment.<sup>141</sup> However, if there is any doubt as to whether information may be disclosed, the patient's explicit consent should be sought. Of course, any information shared with other staff imposes a confidentiality obligation on them. Consent to use patient information in research publications may also be implied, provided the patient's name is not used and the patient is not recognizable from the information disclosed.<sup>142</sup>

There are often difficulties in establishing the existence and scope of an implied consent. For example, young offenders may sign a probation form stipulating that they are to obtain treatment. Does such a document provide implicit consent to disclose information to the probation officer? Since professionals bear the burden of proving consent, it is in their interests to get the patient's explicit consent for the release of any information. If the patient refuses, then the probation officer can resolve this matter directly with the offender.

Consent may be given orally or in writing.<sup>143</sup> Although oral consent is sufficient, written consent provides greater protection in any future dispute. All such consents should be signed and dated and stipulate to whom information may be given. The consent should be obtained at the outset of treatment,

at which time the nature of the confidentiality obligation should be fully explained. The patient then has the choice of refusing or accepting treatment on the terms under which it is being given.

However, care should be taken not to give patients the impression that confidential information will never be released without their consent. There is no such thing as "absolute" or "complete" confidentiality. Aside from disclosure through search warrants and court proceedings, provincial laws require healthcare professionals to report certain types of information to provincial officials. Moreover, as we shall discuss, a healthcare professional may face civil liability for failing to report certain information. It is far better to explain the limits of confidentiality at the outset, rather than to create false expectations that cannot be met. A patient, particularly a young person, who finds that his or her trust has been misplaced may be reluctant to confide again in that person or any other professional.

### *(e) Reporting Obligations*

#### *(i) As Required by Provincial Statute*

Provincial statutes impose several mandatory reporting obligations on healthcare professionals and others. The major reporting obligations are designed to assist in the control of communicable diseases, hazardous driving, and child abuse. In these situations, the perceived threat to the public is felt to outweigh the patient's right to confidentiality, and thus justify the reporting obligation.

Most provinces have legislation that requires healthcare professionals and others to report patients with various diseases to public health officials. Physicians providing services to people who are not hospital patients may be required to report any patient who they believe may have a communicable disease.<sup>144</sup> Hospital administrators have a similar reporting obligation in respect of patients.<sup>145</sup> School principals and teachers may also be required to report any pupils they suspect may have a communicable disease.<sup>146</sup> The list of diseases is extensive and typically includes AIDS, hepatitis, tuberculosis, venereal diseases, and various types of influenza.<sup>147</sup> Failure to report is an offence in some provinces and can result in fines and imprisonment.<sup>148</sup> Generally, no action or other proceeding



may be brought against a person who makes the required report in good faith.<sup>149</sup>

Several provinces have motor vehicle legislation that requires physicians to report the name, address, and clinical condition of any patient of driving age who suffers from a condition that may make it dangerous to drive.<sup>150</sup> Although these provisions were probably intended to deal with medical conditions, such as failing eyesight, heart disease, and epilepsy, they are broad enough to encompass a young person who is a habitual substance abuser. A youth's inexperience in driving, coupled with even occasional drug use, may make it dangerous for him or her to drive.

At least in Ontario, this reporting obligation is limited to medical practitioners and optometrists,<sup>151</sup> and thus would not apply to the vast majority of alcohol and drug treatment professionals. Consequently, there is no legal obligation on them to report a patient who admits to alcohol- or drug-induced blackouts while driving. Indeed, if they were to report such a patient, they might be in breach of their confidentiality obligations. Such “double bind” situations can occur in a variety of circumstances, and we will discuss approaches to handling these dilemmas later in the paper.

The most comprehensive reporting obligations are contained in the provincial child protection legislation. For example, the Ontario *Child and Family Services Act, 1984* requires a variety of professionals — including healthcare professionals, social workers, teachers, and family counsellors — to report any case where they have reasonable grounds to suspect past or present abuse of a child under 16.<sup>152</sup> Child abuse is broadly defined to include: physical harm or sexual molestation for which a parent is responsible; lack of appropriate medical treatment; demonstrable emotional harm that is untreated; or a significant untreated mental, emotional, or developmental condition.<sup>153</sup> This broad definition of abuse would likely include children who are not receiving treatment for their drug or alcohol problems. In any event, facts that indicate parental abuse may emerge in the course of alcohol or drug treatment. The healthcare professional would be required to report such abuse.

In several provinces, these reporting obligations only cover abuse of children under 16. However,

other provinces extend the obligation to abuse of all minors. The child protection legislation generally takes precedence over any conflicting provisions of other provincial statutes.<sup>154</sup> Consequently, despite their confidentiality obligations, professionals may be required to report cases of suspected child abuse. In some provinces, failure to report is an offence punishable by a fine or imprisonment. Most provinces specifically provide that no action can be brought against a person for reporting as required.<sup>155</sup>

The chart in Appendix 1 (pages 3-24, 3-25) outlines the reporting obligations in the other provinces.

### *(ii) Obligation to Report Criminal Offences*

Unless required by statute, people have no legal obligation to assist the police or answer their questions.<sup>156</sup> Similarly, under Canadian criminal law, there is no general legal obligation to report an offence that one knows has been or, with the exception of treason,<sup>157</sup> is about to be committed.<sup>158</sup> Consequently, healthcare professionals need not report a patient's illicit drug use to the police, nor even acknowledge that a patient is seeking treatment. However, there is nothing preventing healthcare professionals from reporting crimes, provided that the information was not obtained in confidence.

Although a person may lawfully refuse to answer questions, someone who deliberately misleads the police or other criminal justice officials may be guilty of a criminal offence.<sup>159</sup> For example, a patient's probation officer may ask whether the patient has attended counselling as required by a probation order. While the professional can appropriately reply that no information can be disclosed about a patient, he or she cannot falsely state that the patient attended. A professional who does so may be charged with obstructing justice or the crime of being an “accessory after the fact”<sup>160</sup> to the patient's offence of breaching probation.

### *(iii) Civil Liability for Failing to disclose*

Traditionally, the law did not require an individual to control the conduct of another person, whether to protect that person or others who may be foreseeably endangered.<sup>161</sup> Although the courts continue to pay lip service to the concept that “you are not your

brother's keeper," they have increasingly recognized special relationships in which one party will be held civilly liable for the conduct of another.<sup>162</sup> It is now well established that such a relationship exists between parents and children, teachers and pupils, and employers and employees.

It appears that the courts are increasingly prepared to find a similar relationship between healthcare professionals and their patients. For example, healthcare professionals have been held liable for failing to act reasonably in controlling the conduct of confined psychiatric patients.<sup>163</sup> Similar principles would apply to those who provide therapy in a private practice.<sup>164</sup> However, the standard of care expected would be modified to reflect the fact that the healthcare professional has less power to control an outpatient.

Several challenging issues may arise in applying these principles to the treatment of young alcohol and drug users. Consider a situation in which an intoxicated or "high" patient attends a counselling session and causes a car accident while driving home. The counsellor may be sued for negligently allowing the patient to leave in a condition that posed a foreseeable risk of injury to the patient and others.<sup>165</sup> Such a case might succeed if the counsellor had been negligent in failing to recognize that the patient was impaired. The court would probably consider whether the patient was visibly impaired, was known to be irresponsible, and was obviously intending to drive. Although the issue has not arisen concerning healthcare professionals, the Canadian courts are expanding the scope of liability for failing to reasonably manage the intoxicated.<sup>166</sup>

A healthcare professional who learns of a patient's plan to commit a serious crime may be sued for failing to warn or otherwise protect the intended victim. Although the Canadian courts have not yet addressed this issue, some American courts have imposed civil liability on healthcare professionals in these situations. For example, in the leading case of *Tarasoff v. Regents of the University of California*,<sup>167</sup> a psychologist was held liable for failing to warn his patient's intended victim. The patient, who was being treated at the University Hospital, told his psychologist that he intended to kill his former girlfriend when she returned from her vacation. The psychologist concluded that the patient was dangerous, and contacted the campus police. The

patient was picked up, briefly detained, and then released. Neither the woman nor her family were warned. When she returned from holidays, the patient killed her. In imposing liability on the psychologist and the University for failing to warn, the court emphasized that the psychologist's confidentiality obligation to his patient ended when the public peril began.<sup>168</sup>

A healthcare professional may become aware during treatment that a young patient is endangered by his or her substance abuse, physical condition, or home situation. If the patient is within the age limit of the particular province's child protection legislation, then the matter will have to be reported. In this case, there would be no technical violation of the confidentiality obligation, because the disclosure was mandated by law and not made voluntarily.

In contrast, if the patient is older than the particular jurisdiction's age limit for reporting child abuse, the disclosure is no longer required by law. This situation creates a difficult dilemma. If the counsellor breaches the patient's confidence, it is possible that he or she may be sued or prosecuted. However, this is unlikely if the counsellor breached confidence in a reasonable effort to protect the patient from serious harm. If the counsellor maintains confidentiality and the patient is injured, then the counsellor may be sued for failing to protect the patient. As in *Tarasoff*, the situation becomes more complex when the choice is between maintaining the patient's confidentiality and protecting an innocent third party. There have been several successful suits against American healthcare professionals for failing to act in these circumstances,<sup>169</sup> but no comparable cases in Canada. Although there is no clear legal solution, it is best to intervene and err on the side of safety.

## (f) Recordkeeping

### (i) The Importance of Keeping Proper Records

Professionals are well aware of the practical importance of maintaining proper patient records. Patient records provide the basis for reviewing progress, planning patient care, and communicating with others about the patient. As well, accurate records are vital for teaching, research, audits, and accreditation. Clearly, they are also important for effective time management, office administration, billing, and tax purposes.

Finally, records are of profound legal importance. There are various situations in which healthcare professionals may be required to testify concerning a patient's treatment. Thorough records are indispensable to the witness whether testifying as a disinterested expert or as a party in disciplinary proceedings or a civil action.

First, the record serves as the basis for the reconstruction of the facts of the case. A trial often takes place several years and hundreds of patients after the event occurred. The record may be the only way the healthcare professional can recall sufficient details about the case.

Second, the record itself can be invaluable during the trial or hearing. A record that the witness made or approved close to the time of the event can be used by the witness while testifying.<sup>170</sup> Furthermore, the actual record may be admissible as documentary evidence, even if the healthcare professional does not testify.<sup>171</sup> This can be convenient, but at times it is vital. For example, if the professional has died and his or her estate is sued, the record becomes virtually the sole source of information and evidence for the defence.

Third, a professional's credibility in court or other legal proceedings may be influenced by the state of the record. A witness who faces the court armed with a complete record of facts and observations is in a strong position. If the record is accurate, objective, complete, and contemporaneous, the professional will be perceived as organized, methodical, and conscientious. Conversely, a sloppy record leaves the impression of a sloppy practitioner, whether or not that is actually the case.

### *(ii) General Rules for Proper Recordkeeping*

The goal of recordkeeping is to provide a detailed synopsis of events from the initial meeting with the patient until the treatment has ended. A proper record is one that gives a complete picture of the case. It documents all aspects of the treatment and, if necessary, can "speak" in the healthcare professional's place. To ensure adequate records, adherence to the following guidelines is advised.

All statements should be objective, particularly those relating to substance abuse, sexual matters, mental competency, or other sensitive issues. In

order to enhance clarity and credibility, entries should be made in chronological order. Any subsequent alterations, additions, or clarifications should be made openly, with the original entry left intact and legible. Any corrections should be initialled, dated, and explained. The author should sign the record and indicate his or her position. The record should be made in ink and be legible.<sup>172</sup>

Records should be complete, as any omission will probably be interpreted negatively. Of course, the record is not intended to be an exhaustive account of everything that has taken place during treatment. Given that the record may be disclosed to the patient or a court, the author should use common sense in limiting the record to matters that are relevant to the patient's treatment. However, information should not be omitted simply because it is embarrassing or unfavourable, whether to the professional or the patient. The omission of relevant information, however well-intentioned, casts doubt on the accuracy of the entire record — and on the competence of the person who made it.

Information should be recorded in an orderly fashion by the healthcare professional involved. If another person has made the entry, the healthcare professional should review the entry and sign it. In either case, entries should be made or verified near the time of the event, while the professional's memory is still fresh. Otherwise, a witness may not be allowed to use the record when testifying.

### *(iii) Statutory Requirements*

Aside from the practical and legal reasons for maintaining patient records, there may be various statute-based recordkeeping obligations. A violation of these statutory provisions may result in prosecution. In addition, failure to maintain the required records may constitute grounds for professional misconduct.<sup>173</sup>

As previously mentioned, there are a multitude of statutory requirements relating to a professional's recordkeeping obligations. These diverse statutory provisions may define differently what must be recorded, how it is to be recorded, by whom it is to be recorded, who owns the record, who may be given access to the record, and how long the record must be kept. The only way to determine whether one's statutory obligations are met is to know which



acts or regulations apply. Amendments to both the act and its regulations must also be examined. In some cases, responsibility for establishing the recordkeeping requirements has been delegated to an administrative agency or the governing council of the profession. Consequently, the operative rules can only be found in the agency's or profession's by-laws.

It is important to note that legislative requirements provide only a minimum standard. Although a healthcare professional may meet the statutory recordkeeping requirements, a court may nevertheless find that the record does not meet the standard of practice of the profession or is otherwise not adequate. When deciding what information to record, consideration should be given to the various purposes for which a record is made.

### (g) Conclusion

Healthcare professionals should assume that all patient information is confidential, but that nothing

will be privileged. As a working guideline, information should not be disclosed without the patient's consent, unless the professional is compelled by law to do so.

Patient records should be meticulously maintained for both treatment and legal reasons. They should be accurate, complete, and professional. The record should be prepared bearing in mind that it may have to be revealed to the patient or disclosed in legal proceedings.

There are complex and varied statutory requirements governing disclosure, reporting, and recordkeeping obligations. These may be supplemented by the rules that a particular agency or institution adopts. Moreover, additional requirements may be imposed by the governing body of the particular profession. We have canvassed the general principles and provided specific examples of common situations. However, it is incumbent on each professional to ascertain the particular requirements pertinent to his or her own specific situation.

## 3.0 CULPABILITY FOR DRUG OFFENCES

### (a) Introduction

Treatment staff counselling patients involved in illegal drug use may inadvertently risk exposure to criminal charges. Assuming that the staff member acted in good faith, any charge would be based only on technical grounds. Accordingly, given the broad discretion of both the police and Crown prosecutors in deciding whether to lay criminal charges, it is most unlikely that they would choose to prosecute. Nevertheless, the possibility does exist. Since those who are aware of the potential legal risks can best avoid them, this section describes the law applicable to the most relevant charges.

Our discussion is based on the assumption that there is no hint of wrongdoing on the staff member's part. If his or her involvement went beyond a mere technical slip, the fact that the offence arose out of a professional relationship would not provide exoneration. Indeed, rather than mitigating the offence, the staff member's position of professional responsibility would likely be regarded as an aggravating factor.

### (b) Possession of Drugs

Depending on the drug involved, it is a criminal offence under the *Narcotic Control Act (NCA)*<sup>174</sup> or the *Food and Drugs Act (FDA)*<sup>175</sup> to possess an illegal drug. Schedules in both *Acts* set out detailed lists of the substances that each *Act* prohibits.

The offence of possession in its simplest form<sup>176</sup> involves three elements: knowledge, contact, and control. The person charged must know that the substance is a drug, handle it, and exercise some control over it. These three elements must be present at the same time. For example, a person who takes a "joint" from a patient has the necessary elements of the offence. He or she knows that the substance is a narcotic, has handled it personally, and has assumed control over it. Technically, the elements of the offence have been established and the staff member may be convicted of possession. The staff member's motive may be praiseworthy, but that does not change the fact that he or she has committed the offence of possession.

Nevertheless, a charge is unlikely to result. This situation is analogous to a person finding a bag of



marijuana and delivering it to the RCMP in an honest effort to assist the police. That person, like the staff member, has satisfied the elements of the possession offence and could theoretically be charged. However, it is difficult to believe that the police or Crown would bring charges in these circumstances.

Even if a charge is laid, there may not be a conviction. A person who has only brief possession while disposing of a drug may not intend sufficient “control” over the drug to satisfy the requirements of the criminal offence of possession.<sup>177</sup> The key is that the possession must be brief. If a caseworker immediately disposes of the drug or takes it to the police, there is little practical cause for concern. However, if the drug is retained for any appreciable time, its possession will appear ambiguous at best and may give rise to suspicion.

Although the NCA and FDA permit possession in limited circumstances of otherwise illicit drugs, these exemptions would not assist a staff member charged with possession. For example, the Regulation to the NCA exempts people who receive a narcotic on prescription.<sup>178</sup> It also exempts individuals who are authorized to possess a narcotic for purposes of their profession or employment, including pharmacists, dentists, physicians, veterinarians, hospital employees, police officers, and the scientific staff of a provincial or federal ministry.<sup>179</sup> Additionally, there are special exemptions for medical practitioners and their agents, who receive a drug from a person for the purpose of having it analysed.<sup>180</sup> However, such agents must be authorized in writing by the Minister of National Health and Welfare.<sup>181</sup> Therefore, unless previously authorized, a staff member who is given a narcotic by a patient would not be exempted as an agent for the medical staff.

The categories of exempted individuals are further governed by additional requirements that dictate how and why these people obtain the narcotic, what they do with it, and how they dispose of it. Any person claiming a special statutory exemption has the burden of proving that the exemption applies to him or her.<sup>182</sup> Treatment staff do not appear to come within any of the exemptions.

### (c) *Liability as an Accessory*

A staff member who acquires possession of a drug must be distinguished from one who is simply aware that the patient has a “joint.” The staff member’s knowledge of this illegal act does not, in itself, render him or her guilty of possession. However, there are other ways in which a staff member could become implicated in a patient’s criminal offence. A person who knowingly helps (“aids”), encourages (“abets”), or advises (“counsels”) someone to commit an offence is an “accessory” to that offence.<sup>183</sup> Although the accessory has not personally committed the offence, he or she can nevertheless be convicted of the actual offence.

Aiding an offence is the simplest method of becoming an accessory. It is irrelevant whether the aider’s act or omission has any impact on the perpetrator’s commission of the offence. For example, if a staff member gives a patient money for drugs to prevent him or her from stealing the funds, this aid could make the staff member guilty as an accessory to the patient’s subsequent possession of illegal drugs. It is no defence that the staff’s motive was laudable, nor that the patient would have obtained drugs even without that help.

It does not require much to “abet” an offence. A leading case described an abettor as anyone who “encourage[s] intentionally by expressions, gestures, or actions intended to signify approval.”<sup>184</sup> In appropriate circumstances, it is even possible to abet by doing and saying nothing. For example, if one is in a position of control or authority over the perpetrator, inaction could be interpreted as tacit approval. In one such case, the owner of a car, who did not object when his 16-year-old girlfriend drove him at 90 m.p.h., was convicted of dangerous driving as an accessory.<sup>185</sup>

Counselling an offence is very similar to abetting, but is usually applied to a proposed, rather than an ongoing, offence. For example, if a staff member suggests that a patient buy marijuana rather than more dangerous drugs, he or she could be guilty if the patient acquired possession of marijuana. The *Criminal Code* also provides that a person can be convicted of the offence that has been counselled, even if the perpetrator committed the offence in a different way.<sup>186</sup> Thus, the staff member can still be guilty of possession even though the patient

bought heroin instead of the recommended “soft” drug.

#### *(d) Liability for Encouraging Crime*

A conviction as an accessory depends on some other person actually committing the offence. However, if a person counsels or encourages the commission of a crime but the counselled offence is not committed, the act of counselling is itself a separate criminal offence.<sup>187</sup> Arranging for someone to commit an offence, encouraging someone to commit an offence, recommending or advising that someone commit an offence — all constitute counselling.

A notorious case against the Georgia Straight, an “underground” Vancouver newspaper, illustrates the elements of counselling. The paper published an article giving detailed instructions for growing marijuana (cultivation of marijuana is an offence).<sup>188</sup> The article ended with the perhaps

tongue-in-cheek exhortation “Plant Your Seeds!”. That was held sufficient to support a conviction.<sup>189</sup> Because there was no evidence that the article actually influenced anyone to cultivate marijuana, the paper was convicted for the separate offence of “counselling” rather than as an accessory to the offence of cultivating marijuana. The case demonstrates the ease with which conduct can be considered counselling.

#### *(e) Conclusion*

In the appropriate circumstances, it may take very little to become enmeshed in a patient’s illegal drug activities. Such well-intentioned acts as confiscating an illicit drug, or advising a patient to use a less dangerous drug, may technically expose the treatment staff to criminal liability. Although it is unlikely that a staff member would be prosecuted for an innocent technicality, the safer course is to avoid that risk.

### CONCLUSION

Healthcare professionals work in an increasingly complex legal environment. In addition to the legal issues that arise in any healthcare relationship, alcohol and drug treatment programs for the young pose unique, and occasionally thorny, legal questions. The age of the patients and the conflicting expectations of the patients, their parents, and the educational, criminal justice, and social welfare systems all contribute to the delicate position of the healthcare professional.

The purpose of this paper is to increase the understanding and, perhaps more importantly, the sensitivity of staff to the basic legal principles governing the treatment of young alcohol and drug users. We have not attempted to canvass the full range of legal issues that can arise in treating young alcohol and drug users. Rather, we have focused on three basic subject areas: consent to treatment; confidentiality, disclosure, and recordkeeping; and

potential criminal liability. To the extent possible, every effort has been made to provide definitive legal answers in clear and concise terms. In those situations where the current state of the law makes this impossible, we have suggested approaches that should minimize legal difficulties. To date, the Canadian courts — unlike some of their American counterparts — have tended to protect healthcare professionals who act reasonably and in good faith, even if they have committed a technical violation of the law or exceeded their formal legal authority.

The interests of both patients and healthcare professionals are best served when potential legal problems are identified in advance and reasoned policies adopted for their resolution. Clearly, treatment staff should not be forced to address complex legal issues on an *ad hoc* crisis basis. We trust that this paper will encourage thoughtful approaches in the three areas discussed.

**APPENDIX 1: CHILD ABUSE REPORTING OBLIGATIONS**

| ABUSE DEFINITION   | APPLICATION   | PENALTY FOR NOT REPORTING  |
|--|---|--|
| <b>ALBERTA, <u>CHILD WELFARE ACT</u>, S.A. 1984, c. C-8.1.</b>                                       |   |  |
| Child in need of protective services, s.3(5)<br>— broad definition                                   | Any person with reasonable and probable grounds to believe, s. 3(1) | — \$2,000 fine or 6 months imprisonment in default of payment, s. 3(6)<br>— must be reported to professional governing body, s. 3(5)                       |
| <b>BRITISH COLUMBIA, <u>FAMILY AND CHILD SERVICES ACT</u>, S.B.C. 1980, c. 11.</b>                   |   |  |
| Child in need of protection, s. 1  | A person with reasonable grounds to believe, s. 7(1)                | — \$2,000 fine and 6 months imprisonment, s. 7(4)  |
| <b>MANITOBA, <u>CHILD AND FAMILY SERVICES ACT</u>, S.M. 1985-86, c.8.</b>                            |   |  |
| Act or omission, resulting in physical injury, sexual exploitation or emotional disability, s. 17(1) | Person with reasonable belief, s. 18(1)                             | — \$2,000 fine and 3 months imprisonment, s. 18(3)<br>— must be reported to professional governing body and investigated, s. 18.2(1) and (2)               |
| <b>NEW BRUNSWICK, <u>FAMILY SERVICES ACT</u>, R.S.N.B. 1973, c. F-2.2.</b>                           |   |  |
| Physical, emotional or sexual abuse, s. 30(1)  | Any person suspecting, s. 30(1)                                     | Offence for professionals only, s. 30(3)<br>— \$1,000 fine and 6 months imprisonment, s. 138<br>— may be reported to professional governing body, s. 30(4) |
| <b>NEWFOUNDLAND, <u>CHILD WELFARE ACT</u>, 1972, S.M. 1972, No. 37.</b>                              |   |  |
| Child in need of protection, s. 2(a.1)<br>— broad definition   | Every person having information, s. 49(1)                           | — \$1,000 fine and 6 months imprisonment, s. 49(3)   |
| <b>NORTHWEST TERRITORIES, <u>CHILD WELFARE ACT</u>, R.O.N.W.T. 1974, c. C-3.</b>                     |   |  |
| Child in need of protection, s. 14(1)<br>— broad definition  | Any person may report, s. 15(1)                                     | — None   |
| <b>NOVA SCOTIA, <u>CHILDREN'S SERVICES ACT</u>, 1976, R.S.N.S., c.8.</b>                             |   |  |
| Child in need of protection, s. 2(l)<br>— broad definition   | Everyone with information, s. 78(1)                                 | — \$1,000 fine and 1 year imprisonment, s. 83  |

**APPENDIX 1: CHILD ABUSE REPORTING OBLIGATIONS (continued)**

| ABUSE DEFINITION   | APPLICATION   | PENALTY FOR NOT REPORTING   |
|--|---|---|
| <b>PRINCE EDWARD ISLAND, <u>FAMILY AND CHILD SERVICES ACT</u>, S.P.E.I. 1981, c. 12.</b> |   |   |
| Physical, mental or emotional mistreatment, s. 1(1)(a)                                   | Every person with knowledge or reasonable and probable cause to suspect, s. 14(1) | — \$300 fine, s. 50   |
| <b>QUEBEC, <u>YOUTH PROTECTION ACT</u>, R.S. Que, 1977, c. P-34.1.</b>                   |   |   |
| Security or development of child in danger, s. 38(g)                                     | Every person with reasonable cause to believe, s. 39                              | — \$200-\$500 fine plus costs, s. 134   |
| <b>SASKATCHEWAN, <u>FAMILY SERVICES ACT</u>, S.S. 1981, c. F-7.</b>                      |   |   |
| Child in need of protection, s. 15<br>— broad definition                                 | Every person having information, s. 16(1)   | — \$2,000 fine and 6 months, <u>Summary Offences Procedures Act</u> R.S.S. 1978, c. S-63, s. 3(1), as amended |
| <b>YUKON TERRITORY, <u>CHILDREN'S ACT</u>, R.S.Y.T. 1986, c. 22.</b>                     |   |   |
| Child in need of protection, s. 116(1)<br>— broad definition                             | A person with reasonable grounds to believe may report, s. 115(1)                 | — None  |



## ENDNOTES

1. For example, statistics provided by the Canadian Medical Protective Association indicate that 234 suits were brought against doctors in 1976, and that the total costs of settlements, judgments, and legal and administrative expenses were \$4.48 million. In contrast, 915 suits were brought in 1987 and the total costs were \$43.11 million. Even taking into account the roughly 55% increase in doctors during this period, there have been dramatic increases in the number and costs of civil suits.
2. See for example, Ontario, *Report of the Commission of Inquiry into the Confidentiality of Health Information*, (1981), Mr. Justice Krever: Commissioner.
3. See for example, *Clark v. Clark* (1982), 40 O.R. (2d) 383 (Co. Ct.); R. Haliechuk, "Judge won't compel leukemia girl to have transfusions", *Ontario Lawyers Weekly*, Nov. 22, 1985, 20; and *C. v. Wren* (1986), 35 D.L.R. (4th) 419 (Alta. C.A.).
4. For examples of the age of majority provisions, see *Age of Majority Act*, R.S.A. 1980, c. A-4, s. 1; *Age of Majority Act*, R.S.B.C. 1979, c. 5, s. 1; *Age of Majority Act*, R.S.N.B. 1973, c. A-4, s. 1; *Age of Majority and Accountability Act*, R.S.O. 1980, c. 7, s. 1; and *Age of Majority Act*, R.S.P.E.I. 1974, c. A-3, s. 1.
5. Among the classic cases are *Semayne's Case* (1604), 7 E.R. 194 (K.B.); *Money v. Leach* (1765), 19 How. St. Tr. 1002; and *Entick v. Carrington* (1765), 95 E.R. 807 (K.B.).
6. See for example, *Cole v. Turner* (1705), 87 E.R. 907 (Nisi Prius); *R. v. Cotesworth* (1704), 87 E.R. 928; and *Green v. Goddard* (1704), 91 E.R. 540.
7. *Criminal Code*, R.S.C. 1985, c. C-46, s. 265(1).
8. Depending on the facts, a physical interference can give rise to one or more tort actions — battery (physical contact); assault (threat of immediate physical contact); and false imprisonment (imposition of a total restraint of movement).
9. But see *Bolduc v. R.* (1967), 63 D.L.R. (2d) 82 (S.C.C.).
10. *Bettel v. Yim* (1978), 20 O.R. (2d) 617 (Co. Ct.).
11. See J. Fleming, *The Law of Torts*, 7th ed. (1987), 23-24; and W. Keeton et al., *Prosser and Keeton On Torts*, 5th ed. (1984), 39-42.
12. *Cole v. Turner* (1705), 87 E.R. 907 (Nisi Prius).
13. See J. Fleming, *The Law of Torts*, 7th ed. (1987), 23; and W. Keeton et al., *Prosser and Keeton On Torts*, 5th ed. (1984), 40.
14. See *Allan v. New Mount Sinai Hospital* (1980), 28 O.R. (2d) 356 (H.C.), reversed on other grounds (1981), 33 O.R. (2d) 603 (C.A.); *McBain v. Laurentian Hospital* (1982), 35 C.P.C. 292 (Ont. H.C.); and E. Picard, "Onus of Proving Consent to Trespass to the Person: On Whom Does it Rest?" (1979), 17 *Alta. L. Rev.* 322.
15. For a review of the general principles of consent to treatment see G. Sharpe, *The Law and Medicine in Canada*, 2nd ed. (1987), 29-93; and E. Picard, *Legal Liability of Doctors and Hospitals in Canada*, 2nd ed. (1984), 41-147.
16. See *Parmley v. Parmley and Yule*, [1945] 4 D.L.R. 81 (S.C.C.); *Schweizer v. Central Hospital* (1974), 6 O.R. (2d) 606 (H.C.); and *Brushett v. Cowan* (1987), 42 C.C.L.T. 64 (Nfld. S.C.).
17. See *Johnston v. Wellesley Hospital*, [1971] 2 O.R. 103 (H.C.); *Clark v. Clark* (1982), 40 O.R. (2d) 383 (Co. Ct.); *Gillick v. West Norfolk and Wisbech Area Health Authority*, [1985] 3 All E.R. 402 (H.L.); and *C. v. Wren* (1986), 35 D.L.R. (4th) 419 (Alta. C.A.).
18. See *In Re B (A Minor)*, [1981] 1 W.L.R. 1421 (C.A.); *Re Superintendent of Family & Child Service and Dawson* (1983), 145 D.L.R. (3d) 610 (B.C. S.C.); and "Eve" v. "Mrs. E." (1986), 2 S.C.R. 388.
19. This broad definition of volition is illustrated by *Smith v. Stone* (1647), 82 E.R. 533 (K.B.); and *Gilbert v. Stone* (1648), 82 E.R. 539 (K.B.). See also *Norberg v. Wynrib* (1988), 44 C.C.L.T. 184 (B.C. S.C.), affirmed (1990), 66 D.L.R. (4th) 553 (C.A.).
20. Traditionally, a healthcare professional's failure to obtain consent was viewed as a basis for a battery action, whether the lack of consent was due to nondisclosure of risks, misrepresentation or oversight. In the late 1950s, the American courts began to analyse

some, but not all, cases in which a doctor failed to disclose the risks of a procedure in terms of negligence — has the doctor failed to exercise reasonable care in advising the patient of the nature of the procedure and its risks? Several Canadian courts adopted a similar approach. In Canada, as in the United States, this development created uncertainty as to the boundary between medical battery and medical negligence.

In *Reibl v. Hughes* (1981), 114 D.L.R. (3d) 1, the Supreme Court of Canada finally resolved this issue by excluding from battery any claim based on a doctor's failure to disclose the risks of a procedure. Thus, once a patient is aware of the general nature of a procedure and consents to it, he or she cannot sue for battery. A healthcare professional's failure to properly inform a patient of the risks of a medical procedure can only give rise to a suit in negligence. Although this decision affects the patient's remedy, it does not decrease the healthcare professional's need to obtain consent.

21. *Reibl v. Hughes* (1981), 114 D.L.R. (3d) 1 (S.C.C.); and *Hopp v. Lepp* (1980), 112 D.L.R. (3d) 67 (S.C.C.). For recent applications of the principles in *Reibl* and *Hopp*, see *Haughian v. Paine* (1987), 40 C.C.L.T. 14 (Sask. C.A.); *Mitchell v. MacDonald* (1987), 40 C.C.L.T. 266 (Alta. Q.B.); *Rocha v. Harris* (1987), 36 D.L.R. (4th) 410 (B.C. C.A.); and *Rayner v. Knickle* (1988), 47 C.C.L.T. 141 (P.E.I. S.C.).
22. *Reibl v. Hughes* (1981), 114 D.L.R. (3d) 1 (S.C.C.). The scope of a doctor's duty to disclose also arose in *Hopp v. Lepp* (1980), 112 D.L.R. (3d) 67, a case decided by the Supreme Court of Canada shortly before *Reibl*. The doctor in *Hopp* failed to disclose that: the operation would be his first such operation since obtaining his specialty licence; if complications arose he would have to contact Calgary because there were no neurosurgeons or neurologists in Lethbridge; and the operation was a serious one. Agreeing with the trial judge, the Supreme Court concluded that the doctor had not breached his duty to disclose. The evidence indicated that the doctor had performed 60 of these operations during his residency and about half of these without actual supervision. It was

also established that the operation was of a routine nature and could be performed as well in Lethbridge as in Calgary. Although the trial judge did not specifically address the issue, he apparently concluded that the plaintiff was aware of the seriousness of the operation.

23. (1987), 40 C.C.L.T. 14 (Sask. C.A.).
24. *Ibid.*, at 41. See also *Kueper v. McMullin* (1986), 37 C.C.L.T. 318 (N.B. C.A.); *Coughlin v. Kuntz* (1987), 42 C.C.L.T. 142 (B.C. S.C.); and *Rayner v. Knickle* (1988), 47 C.C.L.T. 141 (P.E.I. S.C.).
25. *Reibl v. Hughes* (1981), 114 D.L.R. (3d) 1 (S.C.C.); and *Sinclair v. Boulton* (1985), 33 C.C.L.T. 125 (B.C. S.C.).
26. See *Petty v. Mackay* (1984), 31 C.C.L.T. 155 (B.C. C.A.); *Ferguson v. Hamilton Civic Hospitals* (1985), 50 O.R. (2d) 754 (C.A.); *Kitchen v. McMullen* (1989), 62 D.L.R. (4th) 481 (N.B.C.A.); and P. Osbourne, "Causation and the Emerging Doctrine of Informed Consent to Medical Treatment" (1985), 33 C.C.L.T. 131.
27. For a review of the principles of informed consent, see G. Robertson, "Part One: Informed Consent in Canada: An Empirical Study" (1985), 18(1) *Annals RCPSC* 49; G. Robertson, "Part Two: Informed Consent in Canada: An Empirical Study" (1985), 18(2) *Annals RCPSC* 125; and G. Sharpe, *The Law and Medicine in Canada*, 2nd ed. (1987), 34-55.
28. *O'Brien v. Cunard SS. Co. Ltd.* (1891), 28 N.E. 266 (S.J.C. Mass.). See also *Reynen v. Antonenko* (1975), 30 C.R.N.S. 135 (Alta. S.C.); and *Strachan v. Simpson*, [1979] 5 W.W.R. 315 (B.C. S.C.).
29. [1935] 1 W.W.R. 714 (Alta. S.C.). See also *Allan v. New Mount Sinai Hospital* (1980), 28 O.R. (2d) 356 (H.C.), reversed on other grounds (1981), O.R. (2d) 603 (C.A.).
30. *Marshall v. Curry*, [1933] 3 D.L.R. 260 (N.S. S.C.). This right to proceed without consent has been narrowly defined. For example in *Murray v. McMurchy*, [1949] 2 D.L.R. 442 (B.C. S.C.), the defendant surgeon tied the plaintiff's fallopian tubes during a Caesarian section when he discovered tumours in the wall of her uterus. The court held that the health hazards that the tumours might pose in a subsequent pregnancy did not

- warrant this drastic action and awarded the plaintiff \$3,000 damages. See also *Parnley v. Parnley and Yule*, [1945] 4 D.L.R. 81 (S.C.C.); and *Boyer v. Grignon* (1988), 46 C.C.L.T. 47 (Que. S.C.).
31. See *Male v. Hopmans* (1967), 64 D.L.R. (2d) 105 (Ont. C.A.); and *Villeneuve v. Sisters of St. Joseph of Diocese of Sault Ste. Marie* (1971), 18 D.L.R. (3d) 537 (Ont. H.C.). The exact scope of this principle may be difficult to define in a specific case. Contrast the decision in *Pridham v. Nash* (1986), 57 O.R. (2d) 347 (H.C.) with that in *Brushett v. Cowan* (1987), 42 C.C.L.T. 64 (Nfld. S.C.).
  32. *Kenny v. Lockwood*, [1932] 1 D.L.R. 507 (Ont. C.A.); and *Male v. Hopmans* (1967), 64 D.L.R. (2d) 105 (Ont. C.A.).
  33. The exact scope of the privilege is difficult to define. In *Hopp v. Lepp* (1980), 112 D.L.R. (3d) 67, at 79 (S.C.C.), Chief Justice Laskin appeared to eliminate the privilege. Yet, in *Reibl v. Hughes* (1981), 114 D.L.R. (3d) 1, at 13, (S.C.C.), Laskin suggests that the patient's emotional state is relevant to the doctor's obligation to disclose risks.
  34. *Reibl v. Hughes* (1981), 114 D.L.R. (3d) 1 (S.C.C.); and *Hajgato v. London Health Association* (1982), 36 O.R. (2d) 669, affirmed 23 A.C.W.S. (2d) 54 (Ont. C.A.).
  35. See for example, O. Reg. 518/88, s. 25; P.E.I. Reg. EC574/76, s. 48; and Sask. Reg. 331/79, s. 55.
  36. See for example, *Brushett v. Cowan* (1987), 42 C.C.L.T. 64 (Nfld. S.C.); and *Montaron v. Wagner* (1988), 43 C.C.L.T. 233 (Alta. Q.B.). See also *Casey v. Provan* (1984), 30 C.C.L.T. 169 (Ont. S.C.) and *Stamos v. Davies* (1985), 33 C.C.L.T. 1 (Ont. S.C.), in which the signed consent forms were held to be invalid, but the plaintiffs' claims were dismissed on other grounds.
  37. See for example, *Beausoleil v. La Communauté Des Soeurs De La Charite De La Providence* (1964), 53 D.L.R. (2d) 65 (Que. Q.B.).
  38. See G. Sharpe, *The Law and Medicine in Canada*, 2nd ed. (1987), 85-90; and E. Picard, *Legal Liability of Doctors and Hospitals in Canada*, 2nd ed. (1984), 43-44.
  39. See note 14.
  40. See note 17.
  41. See note 30.
  42. See E. Picard, *Legal Liability of Doctors and Hospitals in Canada*, 2nd ed. (1984), 55-60.
  43. Few medical issues have generated greater academic interest than the age of consent. See for example, W. Wadlington, "Minors and Health Care: The Age of Consent" (1973), 11 *Osgoode Hall L.J.* 115; B. Tomkins, "Health Care For Minors: The Right to Consent" (1974-75), 40 *Saskatchewan L. Rev.* 41; and G. Thomson, "Minors and Medical Consent" (1981), 2 *Health Law in Canada* 76.
  44. [1971] 2 O.R. 103 (H.C.).
  45. See R. Haliechuk, "Judge won't compel leukemia girl to have transfusions", *Ontario Lawyer's Weekly*, Nov. 22, 1985, 20.
  46. This decision stands in sharp contrast to that in *Pentland v. Pentland* (1978), 86 D.L.R. (3d) 585 (Ont. H.C.), which reflects a much more paternalistic attitude towards young people. See also M. Haig, "Blood transfusions for infants upheld", *London Free Press*, Nov. 30, 1985, A1.
  47. (1986), 35 D.L.R. (4th) 419 (Alta. C.A.).
  48. *Gillick v. West Norfolk and Wisbech Area Health Authority*, [1985] 3 All E.R. 402, at 423 (H.L.).
  49. However, see for example *Infants Act*, R.S.B.C. 1979, c. 196, s. 16; *Medical Consent of Minors Act*, S.N.B. 1976, c. M-6.1 ss. 2 and 3; and Sask. Reg. 331/79, s. 55.
  50. There is a fourth exception to the common law test. Section 3(1) of the *Human Tissue Gift Act*, R.S.O. 1980, c. 210, prohibits anyone who is under 16, or who is incompetent, from being a live donor of non-regenerative tissue. Similar legislation has been enacted across Canada. See for example, *Human Tissue Gift Act*, R.S.A. 1980, c. H-12, s. 3; and *The Human Tissues Act*, S.M. 1987-88, c. 39, s. 9.
  51. R.S.O. 1980, c. 410.
  52. O. Reg. 518/88, s. 25.
  53. *Ibid.*, s. 25(1)(b). For similar provisions in other jurisdictions see P.E.I. Reg. EC 574/76, s. 48; and Sask. Reg. 331/79, s. 55.
  54. R.S.O. 1980, c. 262.
  55. *Ibid.*, s. 1d(1) and (2).
  56. *Ibid.*, s. 1a.
  57. It should be noted that Ontario is the only province that establishes a statutory age requirement in its mental health legislation.



58. S.O. 1984, c. 55, ss. 27 and 28.
59. *Ibid.*, s. 3(1) 26 "service" and 27 "service provider".
60. *Ibid.*, s. 27(1).
61. *Ibid.*, s. 27(2).
62. *Ibid.*, s. 28.
63. *Ibid.*, s. 4.
64. In 1975, the Uniform Law Conference of Canada adopted *The Medical Consent of Minors Act*, which provides a comprehensive statutory regime to govern the age of consent to medical treatment. However, to date only New Brunswick has enacted the necessary provincial legislation. See *The Medical Consent of Minors Act*, S.N.B. 1976, c. M-6.1.
65. Unfortunately, there is no comprehensive review of the federal or provincial statutes that authorize treatment in the absence of consent. See, however, *Attorney General of British Columbia v. Astaforoff*, [1984] 4 W.W.R. 385 (B.C. C.A.); and E. Carroll, "Forced Feeding of Prisoners: Mary Astaforoff, A Case in Point" (1983), 4 *Health Law in Canada*, 85.
66. For an interesting case on competency to refuse psychiatric treatment, see *Institut Philippe Pinel de Montreal v. Dion* (1983), 2 D.L.R. (4th) 234 (Que. S.C.).
67. See L. Vandervort, "Medical Treatment of Penitentiary Inmates" (1977), 3 *Queens L.J.* 368; and M. Somerville, "Refusal of Medical Treatment in "Captive" Circumstances" (1985), 63 *Can. Bar Rev.* 59. But see *Procureur General du Canada c. Hopital Notre-Dame*, [1984] C.S. 426 (Que. S.C.).
68. *Pohoretsky v. The Queen* (1987), 33 C.C.C. (3d) 398 (S.C.C.); and *R. v. Dymont* (1988), 45 C.C.C. (3d) 244 (S.C.C.).
69. *Re Laporte and The Queen* (1972), 8 C.C.C. (2d) 343; *R. v. Truchanck* (1984), 39 C.R. (3d) 137 (B.C. Co. Ct.); and *R. v. Greffe* (April 12, 1990), unreported (S.C.C.).
70. See *R. v. Carter* (1982), 144 D.L.R. (3d) 301 (Ont. C.A.); and *R. v. Katsigiorgis* (1987), 39 C.C.C. (3d) 256 (Ont. C.A.).
71. *R. v. Dymont* (1988), 45 C.C.C. (3d) 244 (S.C.C.).
72. See note 70.
73. *Criminal Code*, R.S.C. 1985, c. C-46, s. 256.
74. *Ibid.*, s. 256(1)(a), and (b).
75. *Ibid.*, s. 256(b)(ii).
76. *Ibid.*, s. 257(2).
77. *Ibid.*, s. 257(1).
78. As discussed earlier, the provincial mental health legislation may provide a statutory test of competency that supplants the common law principles. See for example, the Ontario *Mental Health Act*, R.S.O. 1980, c. 262, s. 1(g).
79. See generally, M. Schiffer, *Mental Disorder and the Criminal Trial Process* (1978), 289-322; E. Liberman, "Mental Competency and Medical Treatment in Ontario" (1985), 6 *Health Law in Canada* 32; and H. Savage and C. McKague, *Mental Health Law in Canada* (1987), 95-129.
80. See *Kelly v. Hazlett* (1976), 1 C.C.L.T. 1 (Ont. H.C.); *MacKinnon v. Ignacio, Lamond and MacKeough* (1978), 29 N.S.R. (2d) 656 (S.C.).
81. See *R. v. Smith* (1989), 6 W.C.B. (2d) 250 (Ont. Dist. Ct.).
82. See generally, B. Dickens, "The Role of the Family in Surrogate Medical Consent" (1980), 1 *Health Law in Canada* 49; and G. Sharpe, "Guardianship: Two Models for Reform" (1983), 4 *Health Law in Canada* 13.
83. See for example, *Pentland v. Pentland* (1978), 86 D.L.R. (3d) 585 (Ont. H.C.).
84. "*Eve*" v. "*Mrs E.*" (1986), 2 S.C.R. 388. But see *Re B*, [1987] 2 All E.R. 206 (H.L.). See also J. Magnet, "Neonatal Intensive Care: The Dilemma for Medical Law" (1981), 13 *Ottawa L.R.* 345; G. Ferguson, "The Right to Treatment: Re Stephen Dawson" (1986), 6 *Health Law in Canada* 55; and E. Keyserlingk, "Non-Treatment in the Best Interests of the Child: A Case Commentary of *Couture-Jacquet v. Montreal Children's Hospital*" (1987), 32 *McGill L.J.* 413.
85. See for example, *Re S.B.* (1983), 36 R.F.L. (2d) 70 (Ont. Prov. Ct.).
86. For examples of the relevant provincial legislation, see: *Child Welfare Act*, S.A. 1984, c. C-81, s. 25; *Family and Child Services Act*, S.B.C. 1980, c. 11, s. 10(b); *Child and Family Services Act*, 1984, S.O. 1984, c. 55, s. 53; and *Family and Child Services Act*, S.P.E.I. 1981, c. 12, s. 34(2).
87. *Boase v. Paul*, [1931] 4 D.L.R. 435 (Ont. S.C.); *Parmley v. Parmley and Yule*, [1945] 4 D.L.R. 81 (S.C.C.); and *Guimond v.*



- Laberge* (1956), 4 D.L.R. (2d) 559 (Ont. C.A.).
88. W. Keeton et al., *Prosser and Keeton on the Law of Torts*, 5th ed. (1984), 119.
  89. See *Latter v. Braddell* (1880), 50 L.J.Q.B. 166 (C.P.); and *Norberg v. Wynrib* (1988), 44 C.C.L.T. 184 (B.C.S.C.).
  90. *R. v. Maurantonio* (1967), 65 D.L.R. (2d) 674 (Ont. C.A.); and *Bolduc v. R.* (1967), 63 D.L.R. (2d) 82 (S.C.C.).
  91. For example, various statutory provisions would have to be considered in the case of a young offender who was diagnosed in a public hospital as having venereal disease. Overlapping provisions would govern the issues of consent, recordkeeping, confidentiality, and reporting.
  92. For example, O. Reg 518/88, s. 4(a)(vi), provides that a hospital board shall pass by-laws establishing committees to assess medical records.
  93. For example, in *Fraser v. Evans*, [1969] 1 Q.B. 349 (C.A.), the court stated at 361: No person is permitted to divulge to the world information which he had received in confidence, unless he has just cause or excuse for doing so. Even if he comes by it innocently, nevertheless once he gets to know that it was originally given in confidence, he can be restrained from breaking that confidence. See also *Parry-Jones v. The Law Society and Others*, [1968] 1 All E.R. 177 (C.A.); *Tournier v. National Provincial and Union Bank of England*, [1924] 1 K.B. 461 (C.A.); and *Cronkwright v. Cronkwright* (1971), 14 D.L.R. (3d) 168 (Ont. H.C.).
  94. See for example *Hospitals Act*, C.S.N.S. 1979, c. H-19, s. 63; *Hospitals Act*, R.S.A. 1980, c. H-11, s. 40; *Mental Health Act*, R.S.O. 1980, c. 262, s. 29; and *Education Act*, R.S.O. 1980, c. 129, s. 237(2)(a) and (b).
  95. See for example, *A.G. v. Mulholland*, [1963] 2 Q.B. 477, at 489-490 (C.A.).
  96. See for example, section 6 of the Canadian Medical Association *Code of Ethics*, (December, 1984), which states that an ethical physician "will keep in confidence information derived from his patient, or from a colleague, regarding a patient and divulge it only with the permission of the patient except when the law requires him to do so."
  97. It should be noted that the right to confidentiality belongs to the patient. Generally, if the patient requests that information be divulged, then the healthcare professional must comply. See *C. v. C.*, [1946] 1 All E.R. 562 (P.D.A.).
  98. R.S.O. 1980, c. 262, s. 29(2).
  99. *Ibid.*, s. 64.
  100. C.S.N.S. 1979, c. H-19, s. 63.
  101. R.S.C. 1985, c. Y-1.
  102. *Ibid.*, s. 38.
  103. A contractual relationship generally exists between healthcare professionals and their patients. However, patients suing healthcare professionals often claim for both breach of contract and negligence in a single law suit. See *Hughston v. Jost*, [1943] O.W.N. 3 (H.C.); and *Gibson v. Bagnall* (No. 2) (1979), 24 O.R. (2d) 567 (H.C.).
  104. For example, a healthcare professional who includes untrue defamatory comments in a patient's record may be sued for libel. See *Foran v. Richman* (1975), 64 D.L.R. (3d) 230 (Ont. C.A.).
  105. See H. Glasbeek, "Limitations on the Action of Breach of Confidence" in D. Gibson (ed.), *Aspects of Privacy Law*, (1980), 217; A. Vickery, "Breach of Confidence: An Emerging Tort" (1982), 82 *Columbia L. Rev.* 1426; and S. Rodgers-Magnet, "Common Law Remedies for Disclosure of Confidential Medical Information" in F. Steel and S. Rodgers-Magnet (eds.), *Issues in Tort Law*, (1983), 265.
  106. The ethical duty of confidentiality is broader than the legal duty at common law. See *Furniss v. Fitchett*, [1958] N.Z.L.R. 396 (S.C.).
  107. See for example, *Medical Profession Act*, R.S.A. 1980, c. M-12, ss. 34 and 36; and *Health Disciplines Act*, R.S.O. 1980, c. 196, s. 60(3) and Reg. 448, R.R.O. 1980, s. 27(22).
  108. For a comprehensive review of privilege, see P. McWilliams, *Canadian Criminal Evidence*, 2nd ed. (1984), 915-924 and 963-976.
  109. *Ibid.* 920-924. See also B. McLachlin, "Confidential Communications and the Law of Privilege" (1977), 11 *U.B.C. L. Rev.* 266; and H. Glasbeek, "Limitations on the Action

- of Breach of Confidence" in D. Gibson (ed.), *Aspects of Privacy Law*, (1980), 217.
110. See for example, *Re Kryschuk and Zulynik* (1958), 14 D.L.R. (2d) 676 (Sask. P.M. Ct.) (social worker); *G. v. G.*, [1964] 1 O.R. 361 (H.C.) (marriage counsellor); *R. v. Smith* (1985), 8 O.A.C. 241 (C.A.), leave to appeal dismissed (1985), 11 O.A.C. 317 (S.C.C.) (psychiatrist); and B. McLachlin "Confidential Communications and the Law of Privilege" (1977), 11 *U.B.C. L. Rev.* 266.
  111. For example, the Law Reform Commission of Canada recommended that a qualified privilege be granted to professionals. The information would be privileged only if the court determined that the protection of privacy outweighed the public interest in the administration of justice. See *Report on Evidence*, (1975), 80.
  112. *Medical Act*, R.S.Q. 1977, c. M-9, s. 42.
  113. *R. v. Potvin* (1971), 16 C.R.N.S. 233 (Que. C.A.).
  114. See *Cook v. Dufferin-Peel Roman Catholic Separate School Board* (1983), 34 C.P.C. 178 (Ont. S.C.); *R. v. B.* (1979), 2 Fam. L. Rev. 213 (Ont. Prov. Ct.); and *R. v. Snider*, [1954] S.C.R. 479.
  115. *Education Act*, R.S.O. 1980, c. 129, s. 237(2).
  116. *R. v. B.* (1979), 2 Fam. L. Rev. 213 (Ont. Prov. Ct.).
  117. *Slavutych v. Baker*, [1976] 1 S.C.R. 254.
  118. *R. v. R.S.* (1985), 19 C.C.C. (3d) 115 (Ont. C.A.).
  119. For example, see *Dembie v. Dembie* (1963), 21 R.F.L. 46 (Ont. H.C.).
  120. See *G. v. G.*, [1964] 1 O.R. 361 (H.C.); and *R. v. Hawke* (1974), 3 O.R. (2d) 210 (H.C.).
  121. See for example, *Public Hospitals Act*, R.S.O. 1980, c. 410, s. 11, which provides that the "medical record compiled in a hospital for a patient or an out-patient is the property of the hospital." See also Sask. Reg. 331/79, s. 16.
  122. For example, if a ward of the Children's Aid Society is treated in a public hospital, then the record disclosure requirements of both the *Child and Family Services Act*, 1984, S.O. 1984, c. 55, s. 165 and O. Reg. 518/88, s. 21, apply.
  123. *Freedom of Information Act*, S.M. 1985-86, c. 6; *Right to Information Act*, S.N.B. c. R-10.3; *Freedom of Information Act*, S.N. 1981, c. 5; and, *Freedom of Information Act*, S.N.S. 1977, c. 10. Both British Columbia and Saskatchewan have general privacy statutes, but they do not provide any specific protection of records. See *Privacy Act*, R.S.B.C. 1979, c. 336; and *Privacy Act*, R.S.S. 1978, c. P-24.
  124. *Freedom of Information and Protection of Privacy Act*, 1987, S.O. 1987, c. 25, s. 21.
  125. *Hospitals Act*, R.S.A. 1980, c. H-11, s. 40(5)(a); O. Reg. 518/88, s. 21(4)(c)(i); and Sask. Reg. 331/79, s. 16(2)(c).
  126. *Mental Health Act* R.S.A. 1980, c. M-13, s. 37(6)(a); and *Mental Health Act*, R.S.O. 1980, c. 262, as amended, s. 29a.
  127. *Mental Health Act*, R.S.A. 1980, c. M-13, s. 37 (6)(b); and *Mental Health Act*, R.S.O. 1980, c. 262, s. 29(3)(a).
  128. *Child and Family Services Act*, 1984, S.O. 1984, c. 55, s. 163(2)(e),(f) and (g).
  129. *Ibid.*, s. 162(b).
  130. *Ibid.*, s. 167(1)(a).
  131. *Ibid.*, s. 167(1)(b) and (2).
  132. *Ibid.*, ss. 165(3) and 167(2).
  133. *Ibid.*, s. 165(3).
  134. S.M. 1985-86, c. 8, s. 76(3).
  135. *Ibid.*, s. 76(4).
  136. S.A. 1984, c. C-8.1, s. 92.
  137. *Ibid.*, s. 91(3).
  138. See for example, *Rules of Civil Procedure*, O. Reg. 560/84, Rule 30.
  139. For a discussion of release of information to family members, see G. Mason and R. McCall Smith, *Law and Medical Ethics* (1983), 101-104. For a discussion of disclosure to employers, see *Halls v. Mitchell*, [1928] S.C.R. 125; and *Miron v. Pohran* (1981), 8 A.C.W.S. (2d) 509 (Ont. Co. Ct.). Regarding disclosures to police, see G. Sharpe, *The Law and Medicine in Canada*, 2nd ed. (1987), 187-191.
  140. See for example, *Mental Health Act*, R.S.A. 1980, c. M-13, s. 37(6); *Hospitals Act*, C.S.N.S. 1979, c. H-19, s. 63(1); and *Child and Family Services Act*, 1984, S.O. 1984, c. 55, s. 165.
  141. However, some discretion must be exercised in disclosing confidential information even to colleagues. *Re: Lavasseur and College of Nurses of Ontario* (1983), 18 A.C.W.S. (2d)

- 126 (Ont. H.C.). See also *Halls v. Mitchell*, [1928] S.C.R. 125.
142. *Doe v. Roe* (1977), 400 N.Y.S. 2d 668 (S.C.).
143. Some statutes, however, require consent in writing. See note 35.
144. See for example: *Public Health Act*, C.S.A., c. P-27.1, s. 33(1); *Health Act*, R.S.B.C. 1979, c. 161, s. 88; *Communicable Diseases Act*, R.S.N. 1970, c. 52, s. 4(1); *Health Act*, R.S.N.S. 1967, c. 247, ss. 60(1), 76(1) and 93(1); and *Health Protection and Promotion Act*, 1983, S.O. 1983, c. 10, s. 28.
145. See for example: *Public Health Act*, C.S.A. c. P-27.1, s. 33(1); *Health Act*, R.S.B.C. 1979, c. 161, s. 3; *Communicable Diseases Act*, R.S.N. 1970, c. 52, s. 5(1); and *Health Protection and Promotion Act*, 1983, S.O. 1983, c. 10, s. 27(1). The obligation of a hospital administrator in Nova Scotia, however, extends only to reporting cases of venereal disease. See *Health Act*, R.S.N.S. 1967, c. 247, s. 93(1).
146. See for example: *Public Health Act*, C.S.A. c. P-27.1, s. 33(1); *Health Act*, R.S.B.C. 1979, c. 161, s. 103; *Communicable Disease Act*, R.S.N. 1970, c. 52, s. 5(1); *Health Protection and Promotion Act*, 1983, S.O. 1983, c. 10, s. 28; and *Public Health Act*, S.P.E.I. 1980, c. 42, s. 12(2).
147. See for example: Alta. Reg. 238/85; B.C. Reg. 4/83; Man. Reg. 338/88; N.B. Reg. 88/200; and O. Reg. 161/84.
148. Failure to report is not an offence in Manitoba, New Brunswick, Prince Edward Island, or Saskatchewan. However, in Ontario and Alberta, for example, failure to report may result in a fine of up to \$5,000. See *Health Protection and Promotion Act*, 1983, S.O. 1983, c. 10, ss. 99(2) and 100; *Public Health Act*, C.S.A., c. P-27.1, s. 81(3).
149. For example, see *Health Protection and Promotion Act*, 1983, S.O. 1983, c. 10, s. 94(4).
155. See for example: *Motor Vehicle Act*, R.S.B.C. 1979, c. 288, s. 221; *Highway Traffic Act*, S.M. 1985-86, c. 3, s. 157(1); and *Highway Traffic Act*, R.S.O. 1980, c. 198, s. 177(1). It is interesting to note that the requirement in Alberta is merely discretionary. See *Motor Vehicle Administration Act*, C.S.A., c. M-22, s. 14.
151. *Highway Traffic Act*, R.S.O. 1980, c. 198, ss. 177 and 178.
152. *Child and Family Services Act*, 1984, S.O. 1984, c. 55, s. 68(3).
153. *Ibid.*, ss. 68(1) and 37(2)(a),(c),(e),(f),(h).
154. See for example: *Child Welfare Act*, S.A. 1984, c. C-8.1, s. 3(2); *Family Services Act*, R.S.N.B. 1973, c. F-2.2, s. 30(2); *Children's Services Act*, C.S.N.S., c. C-13, s. 77(1); and *Child and Family Services Act*, 1984, S.O. 1984, c. 55, s. 68(7).
155. See *Child Welfare Act*, S.A. 1984, c. C-8.1, s. 3(4); *Child and Family Services Act*, S.M. 1985-86, c. 8, s. 18(3); *Family Services Act*, R.S.N.B. 1973, c. F-2.2, s. 30(5); *Children's Services Act*, C.S.N.S., c. C-13, s. 77(2); *Child and Family Services Act*, 1984, S.O. 1984, c. 55, s. 68(7); *Family and Child Services Act*, S.P.E.I. 1981, c. 12, s. 14(4); and *Family Services Act*, C.S.S., c. F-7, s. 16(2).
156. See for example, *Koechlin v. Waugh* (1957), 11 D.L.R. (2d) 447 (Ont. C.A.); *R. v. Carroll* (1959), 23 D.L.R. (2d) 271 (Ont. C.A.); *Rice v. Connolly*, [1966] 2 Q.B. 414; *Kenlin v. Gardiner*, [1967] 2 Q.B. 510; and *Colet v. The Queen*, [1981] 1 S.C.R. 2.
157. *Criminal Code*, R.S.C. 1985, c. C-42, s. 50(1)(b).
158. See A. Mewett and M. Manning, *Criminal Law*, 2nd ed. (1985), at 437.
159. In the case of the police, the charge would be "obstructing a peace officer in the execution of his duty". In the case of other officials, the charge would be "obstructing justice". See *Criminal Code*, R.S.C. 1985, c. C-42, ss. 129(a) and 139(2).
160. *Ibid.*, s. 23(1).
161. See C. Wright, "Negligent Acts or Omissions" (1941), 19 *Can. Bar Rev.* 465; and H. McNiece and J. Thornton, "Affirmative Duties in Tort" (1949), 58 *Yale L. J.* 1272.
162. See for example, *Jordan House Ltd. v. Menow and Honsberger*, [1974] S.C.R. 239; *Arnold v. Teno* (1978), 83 D.L.R. (3d) 609 (S.C.C.); and *Toews v. MacKenzie* (1980), 109 D.L.R. (3d) 473 (B.C. C.A.).
163. See for example, *University Hospital Board v. Lepine* (1966), 57 D.L.R. (2d) 701 (S.C.C.); *Villemure v. L'Hopital Notre Dame*



- (1972), 31 D.L.R. (3d) 454 (S.C.C.); and *Jinks v. Cardwell* (1987), 39 C.C.L.T. 168 (Ont. S.C.).
164. See for example, *Haines v. Bellissimo* (1977), 82 D.L.R. (3d) 215 (Ont. H.C.); and *Robson v. Ashworth* (1985), 33 C.C.L.T. 229 (Ont. H.C.).
165. In the United States, the police have been held liable when they stopped, but failed to arrest, drunk drivers who subsequently were involved in accidents. See *Irwin v. Town of Ware* (1984), 392 Mass. 745; and *Weldy v. Town of Kingston* (1986), 514 A. 2d 1257 (N.H.).
166. See for example, *Smith v. B.C.* (A.G.) (1988), 30 B.C.L.R. 356 (B.C. C.A.); and *Hague v. Billings* (1989), 48 C.C.L.T. 192 (Ont. H.C.).
167. *Tarasoff v. Regents of the University of California* (1976), 17 Cal. (3d) 425 (Cal. S.C.).
168. For a discussion of the impact of *Tarasoff*, see D. Givelber, W. Bowers and C. Blich, "Tarasoff, Myth and Reality: An Empirical Study of Private Law in Action", [1984] *Wisconsin L. Rev.* 443; and M. Lewis, "Duty to Warn Versus Duty to Maintain Confidentiality: Conflicting Demands on Mental Health Professionals" (1986), 20 *Suffolk U.L.R.* 579.
169. *Ibid.*
170. See J. Sopinka and S. Lederman, *The Law of Evidence in Civil Cases*, (1974), 489-496.
171. See *Ares v. Venner*, [1970] S.C.R. 608. For an example of a statutory provision, see the *Ontario Evidence Act*, R.S.O. 1980, c. 145, ss. 35 and 52. Note that s. 52 is limited to medical records.
172. The signatures should also be identifiable. In a recent Ontario decision, a lawyer's documents were disqualified because his signature was indecipherable. *Vinski v. Lack* (1987), 61 O.R. (2d) 379 (S.C.).
173. See for example, s. 27(3) of Regulation 448, R.R.O. 1980, made under the *Health Disciplines Act*, R.S.O. 1980, c. 196.
174. R.S.C. 1985, c. N-1, s. 3.
175. R.S.C. 1985, c. F-27, s. 47.
176. Although s. 2 of the *NCA* and s. 46 of the *FDA* adopt the broad definitions of "possession" contained in the *Criminal Code*, R.S.C. 1985, c. C-42, s. 4(3), the ordinary meaning of possession would cover most potential possession charges that might arise in a treatment relationship.
177. See *R. v. Christie* (1978), 41 C.C.C. (2d) 282 (N.B. C.A.); and *R. v. McBurney* (1974), 15 C.C.C. (2d) 361 (B.C. S.C.) affirmed (1975), 24 C.C.C. (2d) 44 (C.A.).
178. C.R.C. 1978, c. 1041, s. 3(1)(d).
179. *Ibid.*, s. 3(1).
180. *Ibid.*, s. 68(6).
181. *Ibid.*, s. 68(3)(b).
182. *Narcotic Control Act*, R.S.C. 1985, c. N-1, s. 7(2) and *Food and Drugs Act*, R.S.C. 1985, c. F-27, s. 50(2).
183. *Criminal Code*, R.S.C. 1985, c. C-42, ss. 21 and 22.
184. *R. v. Coney* (1882), 8 Q.B.D. 534, at 557.
185. *R. v. Kulbacki*, [1966] 1 C.C.C. 167 (Man. C.A.).
186. *Criminal Code*, R.S.C. 1985, c. C-42, s. 22.
187. *Ibid.*, s. 464.
188. *Narcotic Control Act*, R.S.C. 1985, c. N-1, s. 6.
189. *R. v. Mcleod and Georgia Straight* (1970), 1 C.C.C. (2d) 5 (B.C. C.A.).



## **CHAPTER 4: ASSESSMENT**

**Margo S. George and Harvey A. Skinner**

The views expressed in this paper are those of the authors and do not necessarily reflect those of the Addiction Research Foundation.

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## INTRODUCTION

There is growing public concern about adolescent alcohol and drug use. This concern may be seen in the dramatic increase in North America in the number of programs offering “specialized treatment” to youth. However, there is a notable lack of research on the effectiveness of these treatment services. Indeed, a comprehensive study for the U.S. Congress on treatment of alcohol problems recently concluded that there is no special population about which so much has been written, yet very little is known about effective treatment for youth with alcohol and drug related problems (Institute of Medicine, 1989).

Most of the research that has been conducted has focused either on examining the prevalence of alcohol and drug use, such as surveys of high school students conducted in Canada and the United States (Smart & Jansen, 1989) or on understanding the processes by which adolescents are introduced to alcohol/drug use and the natural history or “stages” of use (Johnston, O’Malley, & Bachman, 1985; Windle, Barnes, & Welte, 1989; Yamaguchi & Kandel, 1984). Only recently have systematic attempts been undertaken to develop comprehensive instruments for identification and assessment of adolescents who may need treatment for alcohol and drug problems. Considerable controversy exists about what level and pattern of alcohol or drug use actually constitutes a “clinical disorder” requiring formal treatment (Institute of Medicine, 1989). Moreover, there is an absence of rigorously designed studies regarding the effectiveness of treat-

ment services (Wilkinson, 1989; Henderson & Anderson, 1989).

One point stands out from this synopsis of the current state of affairs: there is a pressing need for carefully validated assessment instruments that can be used: 1) for the identification of alcohol and drug problems among youth; 2) for guiding decisions about the level of care and specific type of treatment; and 3) for providing data on the outcome and effectiveness of treatment.

This chapter has three related aims. First, critical issues and gaps in knowledge are examined regarding the assessment of adolescent drug use. Certainly the most compelling issue is to come to grips with what constitutes an alcohol/drug problem that requires or can be helped by some form of treatment. Second, recent attempts are examined to develop comprehensive assessment programs for adolescent drug use. In particular, a description is given of the *Chemical Dependency Adolescent Assessment Project* (CDAAP, 1988) and the *Adolescent Substance Abuse: Assessment and Treatment Referral Guide* developed for the National Institute on Drug Abuse (Tarter, 1988). Third, clinically derived criteria are reviewed for treatment placement and discharge, including the NAATP criteria (Weedman, 1989) and the Cleveland criteria (Hoffman, Halikas, & Mee-Lee, 1987). Although these assessment models and treatment assignment criteria require further evaluation, they do provide excellent prototypes of what a comprehensive assessment should entail.

## 1.0 CRITICAL ISSUES IN ADOLESCENT ASSESSMENT

### 1.1 What Constitutes an Alcohol/Drug Problem That Requires Treatment?

The issue is fundamental to the field of substance abuse, but it is particularly relevant when considering adolescents as a special population. At the adult level, considerable progress has been made in the past decade in the refinement of diagnostic concepts and the development of multidimensional instruments (e.g., American Psychiatric Association, 1987; Wanberg & Horn, 1983). There is a pressing need for similar developments in concepts and instruments at the adolescent level.

The “Chemical Dependency” label has become increasingly popular. However, this label may incorrectly place a focus of attention on the adolescent, when the main source of the problem may lie elsewhere (e.g., family relationships, peer groups). Also, treatment service providers are under increasing pressure from insurers to document and justify the need for treatment. At the same time, an emphasis on early identification of adolescents who misuse alcohol and/or drugs places assessment professionals in a difficult position of distinguishing between transient, experimental use and evidence of clinical problems. Resolution of these issues will require definitions of what constitutes a chemical

dependency problem, as well as the use of standardized diagnostic criteria (Winters & Henly, 1988).

The literature suggests that drinking is part of normal adolescent development, and is related to other transition-marking behaviours including sexual intercourse and marijuana use (Jessor & Jessor, 1975). In this regard, (1988) provides a comprehensive review of studies of the spontaneous or natural remission from problem drinking. Longitudinal studies have found that the rate of remission from heavy drinking is high in adolescence and young adulthood. The majority of those reporting alcohol problems in youth did not report these problems at a second measurement point (1 to 27 years later). Natural recovery rates ranged between 55%-80% for males and 73%-83% for females. These data suggest at least two possible subgroups among heavy or problem drinkers: 1) a majority who will "mature out" of their excessive drinking often without formal intervention; and 2) a smaller number who are likely to progress to chronic alcohol dependence. It is likely that a similar pattern exists for drug use. There is a real danger (Moberg, 1983) that many individuals from the former group (i.e., experimental users, likely to mature out) may be incorrectly or prematurely diagnosed as "chemically dependent." This labelling process could have profound effects upon the individual and his/her family.

### *1.2 Should One Use Assessment Instruments Designed for Adults?*

Many adolescent assessment and treatment facilities use instruments or methods developed for adults. Owen and Nyberg (1983) interviewed professionals from 70 facilities in 19 states in the United States about their procedures for assessing chemical dependency in adolescents. They found that methods used to assess adolescents vary greatly between facilities, and that most use a combination of adult-normed measures and locally developed instruments.

There are problems associated with using adult instruments to assess adolescents unless these devices have been appropriately adapted, tested, and found psychometrically reliable and valid for an adolescent population. First, content and wording of items may not be appropriate for adolescents (e.g., "does your spouse complain about your drug use?"). Second, some procedures used to assess

adolescents can and should be unique from those used for adults (e.g., assessing peer interactions). Third, and most important, diagnostic criteria regarding the severity of problems may differ for adolescent populations, particularly the differentiation among experimental use, abuse, and dependence. Only recently have systematic attempts been made to develop instruments for use exclusively with adolescents (see Section 2 below).

### *1.3 Which Drugs Should One Focus On?*

The shift to polydrug use is an important change over the past several decades in adolescent drug use patterns (Farrow & Deisher, 1986). Although an adolescent's main problem might be with alcohol use, it is likely that the individual may be using at least one other drug (Wilkinson, 1988). Thus, it is essential that the scope of assessment consider a wide variety of possible drugs.

Some of the earlier evidence for multiple drug use is provided by Kandel (1975). She conducted two longitudinal studies based on random samples of high school students, and found four stages in adolescent drug use: Stage 1 – beer/wine, Stage 2 – cigarettes or hard liquor, Stage 3 – marijuana, Stage 4 – other illicit drugs (e.g., LSD, heroin). Data fit a Guttman scale model suggesting that adolescents at any one stage of drug use have used the drug at that particular level plus all lower-ranked drugs, but no drugs at higher-ranked levels. For example, adolescents who smoke cigarettes and/or drink hard liquor (Stage 2) are likely to drink beer and/or wine (Stage 1), but are unlikely to use marijuana (Stage 3).

More recent findings by Windle, Barnes, and Welte (1989) indicate that the progression of adolescent substance use is best represented by a four-factor simplex model. This model implies that there is an invariant pattern of use from alcohol to marijuana to hard drugs — dampeners (e.g., tranquilizers) and/or enhancers (e.g., cocaine). In addition, results suggest that marijuana use is a better predictor of the use of enhancers than the use of dampeners. These findings, coupled with those of Kandel (1975), suggest that knowing what type of drug an adolescent is presently using tells us a lot about previous, current and future drug use. Prevention efforts should vary according to the substance stage level. For example, if an adolescent is using

marijuana, then the focus should be on preventing the progression to hard drugs and eliminating the use of marijuana and alcohol.

#### *1.4 What Is The Dimensional Structure of Drug Use in Adolescence?*

Two of the most fundamental concepts of alcohol dependence in adults have been applied to the assessment of drug abuse in adolescents: 1) dependence is multidimensional rather than unidimensional, and 2) dependence problems are a matter of severity rather than an all-or-none condition. Evidence for the generalizability of these concepts to adolescents is provided by White (1987). Results from a series of confirmatory factor analyses indicate a two-dimensional structure of problem drinking in adolescents: 1) use intensity, for example, frequency and quantity, and 2) use-related problems, for example, interpersonal, social, and symptomatic consequences of drinking.

On the other hand, Donovan and Jessor (1985) provide evidence from a series of maximum likelihood factor analyses which suggest that problem behaviours in adolescents (e.g., problem drinking, illicit drug use, delinquent-type behaviour, and precocious sexual intercourse) comprise a single dimension — unconventionality — in both social environment and personality.

In preliminary analyses of the CDAAP assessment battery, Winters and Henly (1988a) report a strong general factor reflecting psychological involvement with substance use. However, the items were ranked in five stages: 1) social/recreational use; 2) use to alter negative moods; 3) changes in activities to accommodate drug use; 4) deviant/deviant Behaviour behaviour to continue drug use; and 5) drug use to relieve withdrawal effects. In addition, some evidence was found for secondary factors, such as: psychological distress, deviance, social alienation, and family problems. Further analyses using comprehensive assessment batteries (e.g., CDAAP, NIDA in Section 2) with data from various clinical and community settings are needed to identify the primary dimensions (factors) underlying drug use and abuse.

#### *1.5 What Is the Best Way for Accurate Assessment?*

Effective treatment depends not only on the identification of drug use problems, but also on accurate assessment of the extent and severity of these problems. Measurement accuracy is fundamental to the validity or dependability of assessment. However, all assessments are “inaccurate” to some extent, owing to either random or systematic errors of measurement (Crocker & Algina, 1986). Random errors are chance fluctuations in a respondent’s score due to a variety of factors left uncontrolled in the assessment procedure (e.g., guessing, distraction, scoring mistakes). By definition, random errors are not expected to be repeated over different testing periods.

In contrast, systematic errors consistently influence a respondent’s score across different testing occasions. These errors are a source of response bias which lowers the content interpretation or construct validity of an instrument. Examples of systematic errors include: 1) social desirability, presenting an exaggerated positive picture of oneself; 2) denial, minimizing the extent and severity of problems; 3) carelessness, responding randomly or inconsistently; and 4) acquiescence, endorsing all items (Skinner, 1981).

The best means of establishing measurement accuracy in the assessment of drug problems is to assess a particular problem by alternative methods (Skinner, 1984). For example, to assess an adolescent’s drug consumption, self-report data could be obtained from a client and corroborated by structured interview information from different sources such as teachers and family, as well as by laboratory tests (e.g., urine screen for drug traces). It is also important to obtain measures of response style to estimate, for example, the degree to which an adolescent tends to minimize or deny drug use or drug-related problems. These could be obtained separately with an instrument designed to measure response styles, or they could be embedded into other instruments.



## 2.0 ASSESSMENT MODELS IN ADOLESCENT DRUG USE

Contemporary models of adolescent drug assessment are exemplified by the Chemical Dependency Adolescent Assessment Project (CDAAP, 1988) and the National Institute on Drug Abuse (NIDA) *Adolescent Substance Abuse: Assessment and Treatment Referral Guide* (Tarter, 1988). Although the NIDA Guide incorporates a broader range of instruments for assessment than CDAAP, both approaches concur on the following principles:

- Adolescent drug use should be assessed as a complex and multidimensional phenomenon, occurring within a network of psychosocial areas (e.g., family, school, peers);
- An **Early identification** or screening instrument should be used in a variety of community settings to flag individuals with potential/actual problem

areas that need further assessment and possible treatment;

- A **Comprehensive Assessment** should be conducted using alternative methods to measure the level of functioning in various domains including: substance use, physical health, emotional health, family and social relationships, school adjustment, leisure activities;
- **Treatment matching and Referral** should be based on information from a comprehensive assessment and explicitly defined criteria for treatment placements;
- **Data** on the outcome of treatment should be collected and used to validate and refine the assessment and referral process.

**TABLE 4.1**  
CDAAP Assessment Scales and Content Areas

| Instrument  | Content Areas   |
|---|---|
| 1. Personal Experience Screening Questionnaire (PESQ) | Chemical Use Problem Severity (18 items)<br>Drug Use Frequency (4 items)<br>Other Mental/Behavioural Problems (8 items)<br>Defensiveness (faking-good) (5 items)<br>Infrequent (faking-bad) (3 items)   |
| 2. Personal Experience Inventory (PEI)                | Problem Severity Section (129 items) <ul style="list-style-type: none"> <li>i) Basic Scales: <ul style="list-style-type: none"> <li>e.g., Polydrug Use</li> </ul> </li> <li>ii) Clinical Scales: <ul style="list-style-type: none"> <li>e.g., Loss of Control</li> </ul> </li> <li>iii) Validity Scales: <ul style="list-style-type: none"> <li>e.g., Pattern Misfit</li> </ul> </li> <li>iv) Drug Use: <ul style="list-style-type: none"> <li>e.g., Marijuana or Hashish</li> </ul> </li> </ul> Psychosocial Section (147 items) <ul style="list-style-type: none"> <li>i) Personal Adjustment Scales <ul style="list-style-type: none"> <li>e.g., Absence of Goals</li> </ul> </li> <li>ii) Environment Scales <ul style="list-style-type: none"> <li>e.g., Peer Chemical Environment</li> </ul> </li> <li>iii) Validity Scales <ul style="list-style-type: none"> <li>e.g., Defensiveness</li> </ul> </li> </ul> |
| 3. Adolescent Diagnostic Interview (ADI)              | Sociodemographic Information (10 items)<br>Severity of Psychosocial Stressors (18 items)<br>Alcohol Use (24 items)<br>Marijuana Use (24 items)<br>Screen for Other Mental Disorders (12 items)<br>Level of Functioning (14 items)   |



## 2.1 CDAAP Model and Instruments

The CDAAP was initiated in 1982, under the direction of Ken Winters and George Henly. The main purpose of the project was to develop instruments to help counsellors identify, refer, and treat adolescents with drug abuse problems (Winters & Henly, 1987; Chemical Dependency Adolescent Assessment Project, 1988). The model guiding the development of instruments was based on practice and theory: “The convergence between anecdotal clinical reports and the emerging viewpoint in the adult literature of multiple alcoholism syndromes or types led the project to base its model for instrument construction on a multidimensional footing” (Chemical Dependency Adolescent Assessment Project, 1988, p. 2).

The CDAAP model has three “rings.” Problem Severity occupies the centre ring and examines the signs, symptoms, consequences, and patterns (e.g., type of drug, frequency, and duration) of drug use. Psychosocial “risk factors” of drug use form the second ring of the model (e.g., heredity, sociodemographic, interpersonal, and environmental factors). The third and outer ring uses DSM-III-R diagnostic variables to assess drug and drug-related problems. The following three instruments (summarized in Table 4.1) were developed using this three-ring model.

### 2.1.1 Personal Experience Screening Questionnaire (PESQ)

The PESQ is a 38-item self-report screening instrument which provides an indication of whether an adolescent needs a comprehensive assessment (Winters, 1988a, 1988b). Content areas include: Chemical Use Problem Severity, Drug Use Frequency, Other Mental/Behavioural Problems, Defensiveness (faking-good), and Infrequency (faking-bad). The PESQ has good internal consistency reliability (.91) and correlates well with the major problem severity scale of the Personal Experience Inventory (.92). Data are currently being collected regarding norms and validity of the PESQ.

### 2.1.2 Personal Experience Inventory (PEI)

The PEI is a paper-and-pencil questionnaire which assesses both the problem severity (ring one) and psychosocial indicators (ring two) of the CDAAP

assessment model (Winters & Henly, 1988b). Item selection was done in three steps: 1) items were selected from existing measures and grouped by content; 2) service providers rated the clinical importance of each content area; and 3) new items were developed for areas rated highly important. Items to assess defensiveness and invalid responding were also included. In order to test the construct validity of the instrument, approximately 1,100 adolescents (12-19 years), receiving drug assessment or treatment, completed one of the two primary scales (problem severity and psychosocial factors). The problem severity scales were revised based on both rational and empirical strategies. Using the rational strategy, items were assigned to scales apriori, and then based on intercorrelations with their own scale and other scales they were either kept, reassigned, or deleted. Factor and cluster-analytic techniques were used to empirically define the problem severity scales. Clinical utility and interpretability were criteria used to evaluate the scales that emerged consistently across these procedures. Only a rational strategy was used to construct the psychosocial scales. Both primary scales were derived and optimized using the test sample, and then further tested using a separate replication sample.

As a result, a 300-item questionnaire was developed with two primary components. The *Problem Severity Section* has five Basic Scales (e.g., Polydrug Use), five Clinical Scales (e.g., Loss of Control), three Validity Indices (e.g., Pattern Misfit), and questions about drug use frequency and onset. Internal consistency reliability indices for the Problem Severity Scales range from .80 to .97. The *Psychosocial Section* has eight Personal Adjustment Scales (e.g., Absence of Goals), four Family and Peer Environment Scales (e.g., Peer Chemical Environment), and two Validity Indices (e.g., Defensiveness). The Psychosocial Scales have an internal consistency reliability estimate range from .74 to .90. Further descriptions on the development of the PEI are provided in Henly and Winters.

Winters also reports that extensive normative and validation data have been collected on nearly 2,000 adolescents, in clinical and normal samples (CDAAP, 1988). Results indicate good reliability and validity of scale scores, in terms of an acceptable margin of error and relatedness to alternative self-

report questionnaires, family history, diagnoses, parent report, and treatment referral decisions.

### *2.1.3 Adolescent Diagnostic Interview (ADI)*

The ADI is a structured interview schedule which assesses variables associated with the DSM-III-R (American Psychiatric Association, 1987) diagnostic criteria for substance use disorders (Winters & Henly, 1986). In addition, other sections assess drug related problem areas such as: level of functioning at school and at home, mental health, and psychosocial stressors (e.g., self-image). The ADI is intended to complement the PEI by addressing the third ring in the CDAAP model. Items were included from existing structured diagnostic interviews on the basis of experts' opinions. Most items are in a Yes-No format and a summary score is easy to produce. Initial research indicates good reliability (inter-rater agreement) and validity (convergent measures). Findings suggest that all nine DSM-III-R substance dependence symptoms were present in approximately 25% of an adolescent sample (N=74) receiving chemical dependency assessment or treatment (Winters & Henly, 1988a). Furthermore, an average of five diagnostic criteria were reported by those subjects who had one or more DSM-III-R substance dependence symptoms.

### *2.1.4 Clinical Uses of the CDAAP Assessment Battery*

The complete CDAAP assessment battery is aimed at assisting clinicians in identifying and treating adolescents with drug use problems. The PESQ provides clinicians with a brief screening instrument to indicate whether more thorough assessment is warranted. The ADI determines whether the adolescent meets DSM-III-R diagnostic criteria for drug use dependency and if treatment for this dependency is needed. In cases where treatment is recommended, the PEI should be used to assess which characteristics of the drug dependency are relevant for treatment matching. It is assumed that multiple sources of information are used to form a complete assessment (e.g., reports from parents and teachers, behavioural observations, and other psychological tests). In cases where information from different sources is not

corroborated it is necessary to consider alternative hypotheses.

### *2.2 NIDA: Assessment and Treatment Referral Model*

The National Institute on Drug Abuse provided funding to Westover Consultants to develop a manual for adolescent substance abuse assessment and treatment referral (Tarter, 1988). Under the direction of Ralph E. Tarter, Ph.D., a four-step model was developed as a framework for an assessment approach: 1) Early identification; 2) Comprehensive Assessment; 3) Treatment matching; and 4) Referral.

At the Early identification level, dysfunctional areas are flagged within ten possible domains including:

- I. Substance Use
- II. Behaviour Problems
- III. Physical Health
- IV. Psychopathology
- V. Social Skills
- VI. Family Functioning
- VII. School Adjustment
- VIII. Employment
- IX. Peer Relationships
- X. Leisure and Recreation

These domains represent the most important areas identified from the literature regarding the correlates of adolescent drug use. The areas being measured are amenable to treatment intervention. A **Comprehensive Assessment** is then performed on major areas of concern that were flagged at the early identification level. This assessment involves different methods and instruments which are comprehensive and appropriate for an adolescent population, psychometrically reliable and valid, easy to administer and score, and of practical utility for treatment matching and referral. **Treatment matching** is done according to the nature and severity of problems identified in the comprehensive assessment. The focus is on selecting a treatment method which closely addresses the needs identified in the comprehensive assessment. Finally, **Referral** is made to community service providers to meet the specified treatment needs of the adolescent.

**TABLE 4.2**  
**Assessment Domains and Recommended Instruments Adapted from NIDA Manual**

| Domain                          | Recommended Instruments   |
|---------------------------------|---|
| I. Substance Use                | Self-Report of Drug Use Behaviours (Rachal, Williams, Brehm, Cavanaugh, Moore, & Eckerman, 1975)<br><br>Clinical Drug Assessment Scale (Rocky Mountain Behavioral Science Institute)<br><br>Inventory of Drug-Taking Situations (Annis & Martin, 1985)<br><br>Psychoactive Drug Use History (Wilkinson & Martin, 1984)<br><br>Time-Line Method (Sobell, Maisto, Sobell, & Cooner, 1979) |
| II. Behaviour Problems          | Child Behavior Checklist (Achenbach, 1978)  |
| III. Physical Health            | Health Status Evaluation (Tarter, 1988)   |
| IV. Psychiatric Disorder        | Diagnostic Interview Schedule for Children (Costello, Edelbrock, Dulcan, Kalas, & Klaric 1984)<br><br>Symptom Checklist - 90 (Derogatis, Rickels, & Rock, 1976)   |
| V. Social Skills                | Constructive Thinking Inventory (Seymour Epstein)<br><br>Sources of Self-Esteem (Edward J. O'Brien)<br><br>Observational Assessment (Tarter, 1988)  |
| VI. Family Functioning          | Family Assessment Measure (Skinner, Steinhauer, & Santa Barbara, 1983)<br><br>Family Adaptability and Cohesion Evaluation Scales III (Olson, Sprenkle, & Russell, 1979)   |
| VII. School Adjustment          | Wide Range Achievement Test (Jastak & Jastak, 1965)<br><br>Child Behavior Checklist - Teacher's Version (Thomas Achenbach)  |
| VIII. Employment                | The Generalizable Skills Curriculum (Greenan, 1983)   |
| IX. Peer Relationships          | Adolescent Problem Situation Inventory (J. Hawkins)<br><br>Inventory of Drug-Taking Situations (Annis & Martin, 1985)   |
| X. Recreation                   | Fitness Evaluation (Tarter, 1988)<br><br>Individual and Group Counselling Step by Step (P. Edwards)   |
| Identification and Case Finding | Personal Experience Screening Questionnaire (Winters, 1988a; 1988b).<br><br>Drug Use Screening Instrument (Tarter, 1988; in press)<br><br>Drug Abuse Screening Test (Skinner, 1982)<br><br>Adolescent Alcohol Involvement Scale (Mayer & Filstead, 1979)  |



### *2.2.1 Early identification*

The initial phase of assessment consists of two parts: 1) obtaining information related to a client's personal history including: demographics (e.g., age, sex, religion), living situation (e.g., with real parents), academic background (e.g., grade), parents' occupations (e.g., professional), and information about siblings (e.g., name and age); and 2) acquisition of data from the **Drug Use Screening Instrument (DUSI)**. The DUSI briefly assesses the adolescent in ten domains of health, psychological status, and interpersonal relations for the purpose of flagging problem areas. Validation and standardization studies are currently under way to assess the clinical validity of the DUSI. Consequently, as yet it is not intended as a stand-alone instrument; rather, the results of the DUSI aid in deciding which areas should be assessed more comprehensively at the next assessment level. Definite conclusions about the client's drug problems should be deferred until a comprehensive assessment is complete.

The DUSI is suitable for adolescents (age 11-18 years) at or below a sixth grade vocabulary level. It is not intended for severely psychiatrically disturbed or socially deviant clients. It may not be appropriate in certain cultural populations (e.g., Hispanic or Native American), where the interpretation of items may be different from the original meaning.

Two other screening instruments should be considered in addition to the DUSI from the NIDA model and the PESQ from the CDAAP model described above. First, the Drug Abuse Screening Test or DAST (Skinner, 1982; Skinner & Goldberg, 1986) is a 20-item questionnaire that provides a general index of problems related to psychoactive drug use.

Studies have found the DAST to have substantial reliability, to be only moderately correlated with social desirability and defensiveness response styles, and to have good concurrent validity with respect to the frequency of drug use. A recent study by Gavin, Ross, and Skinner (1989) found that the DAST had excellent overall accuracy in classifying patients according to DSM-III criteria for drug abuse/dependence. This study also supported a quantitative assessment of drug use, since there was considerable variability in the severity of problems among those meeting a DSM-III diagnosis.

Second, the Adolescent Alcohol Involvement Scale or AAIS (Mayer & Filstead, 1979) is a 14-questionnaire that was designed to discriminate between users and misusers of alcohol. Studies using the AAIS have found that 15%-18% of respondents were classified as "alcohol misusers" and 2%-4% as "alcoholic" (Moberg, 1983). Scores on the AAIS were also correlated with the use of marijuana and other drugs.

### *2.2.2 Comprehensive Assessment*

The comprehensive assessment includes the ten domains of the DUSI; however, each domain is assessed with greater depth and scope. Treatment objectives are based on the information obtained at this level of assessment.

The following section outlines instruments and methods recommended by NIDA (Tarter, 1988). In addition, instruments which the present authors consider appropriate for assessing adolescent drug use have been added to the substance use and family functioning sections (Table 4.2).

#### *Domain I: Substance Use*

There are several different ways to measure substance use: 1) quantity assesses the amount consumed (e.g., typical dose); 2) frequency examines how often the drug was used (e.g., number of months of drug use); 3) an indication of the reaction towards the drug is obtained through measures of attitude; 4) knowledge assesses a person's understanding of the drug and its effects; and 5) measures of situation of use account for circumstances in which a drug is used.

The instruments outlined in this section include different combinations of substance use indicators. For example, the drug use questionnaire by Rachal, Williams, Brehm, Cavanaugh, Moore, and Eckerman (1975) deals with the quantity, attitude, and knowledge of drug use, whereas the Psychoactive Drug Use History (Wilkinson & Martin, 1984) measures the frequency and quantity of drug use. There is no one "best" instrument. Selection will depend on which measure(s) of substance use would be most appropriate in the clinical setting, in terms of relevance, feasibility, and cost-effectiveness.



Rachal, Williams, Brehm, Cavanaugh, Moore, and Eckerman (1975) have developed a self-report questionnaire to measure drug use behaviours in terms of *quantity* of drug use, *attitudes* toward drug use, and *knowledge* about psychoactive substances. Drug-related issues are also assessed including health and safety, peer and parental interaction and communication, and school and neighbourhood environment. This instrument has 75 multiple-choice items. Tarter (1988) suggests that modifications may be necessary in order to maximize the questionnaire's utility. For example, drug use categories may need to be specified more precisely in order to get a clearer idea of the type of substance being used (e.g., specify marijuana use under cannabis category).

Tarter (in press) recommends using the Clinical Drug Assessment Scale (CDAS) to assess the *quantity* of drug use and psychological aspects related to drug use. The self-rating scale obtains information on 11 classes of drugs: alcohol, marijuana, cocaine, uppers, legal stimulants, hallucinogens, inhalants, downers, heroin, other narcotics, and PCP. The adolescent evaluates his/her current use of these drugs in Part I. Part II assesses quantity of use over the past 18 months, in terms of "ever tried," "light," "medium," or "heavy" use. Various psychological aspects of drug use are measured on a three-point scale. These include emotional adjustment (e.g., depression, anxiety), psychosocial adjustment (e.g., self-esteem, feelings of isolation), relationships with family, peer influences, adjustment in school, and socioeconomic status.

The CDAS has widespread use, particularly in school settings (Tarter, in press). It has been administered to over 100,000 adolescents with results indicating very acceptable psychometric properties. There are, however, two drawbacks to the CDAS: 1) it does not cover all possible drugs; and 2) results need to be computer scored by the developer — the Rocky Mountain Science Institute — for a fee of one dollar per assessment.

The Inventory of Drug-Taking Situations (IDTS; Annis & Martin, 1985) is a 50-item, self-report questionnaire (4-point scale) which provides a profile of the *frequency* with which a client has used drugs and the *situations of use* in the past year. The IDTS has two versions, which focus on alcohol or all other drugs. In addition, separate questionnaires

can be completed for a client's primary and secondary substance of use (e.g., cocaine and cannabis). There are ten possible drug classifications: alcohol, cannabis, hallucinogens, tranquillizers, sedatives, solvents, heroin, other narcotics, cocaine, and stimulants. The measure assesses drug use in response to: 1) Personal States (drug use in response to an event); and 2) Situations Involving Other People (drug use in response to another individual(s)). The IDTS serves as a treatment-planning tool by identifying a client's high-risk situations for drug use. Normative data on a computerized version of the IDTS are currently being collected on a sample of adolescent drug users in treatment.

The Psychoactive Drug Use History is a standardized questionnaire used to assess *frequency* and *quantity* of drug use in the past year (Wilkinson & Martin, 1984). Eight classes of drugs are assessed including alcohol, cannabis, stimulants, tranquillizers, hallucinogens, narcotic analgesics, sedative hypnotics, and solvents. For any drug class in which drug use has been reported in the past year, information is collected on recency of use; the number of months of drug use; the average number of days of use during months of use; the frequency of use on days of use; the typical dose; the usual mode of administration; whether use of the drug had ever been a problem; and, if so, whether it continues to be a problem and how long ago the problem began. The instrument has been used to compare patterns of drug use among adolescents (16-19 years) and young adults (20-30 years) (Martin, Wilkinson, Cordingley, & Leigh, 1987). Principal component analysis revealed four main dimensions of drug use ("Depressant Drugs," "Recreational Drugs," Alcohol, and Solvents). Five typologies were identified using cluster analysis (Alcohol (A), "Depressants" (D), "Recreational" (R), Solvents (S), and "ADR" Type - all classes except solvents). These were related to the age of subjects (e.g., youth were most likely to be "recreational" users). A validation study found good discrimination between age groups on the basis of these dimensions and typologies.

The Time-Line (TL) method is an alternative to *quantity* or *frequency* methods for measuring recent drinking behaviours (Sobell, Maisto, Sobell, & Cooper, 1979). The main advantage of this technique over quantity or frequency measures is its

sensitivity to individual differences. For example, unlike quantity or frequency measures which have individuals indicate an "average" consumption level or pattern, the time-line method has them estimate their actual daily level of consumption over a given time span (Sobell, Sobell, Leo, & Cancilla, 1988). Various memory aids help clients recall their drinking behaviour. Reliability and validity of this method has been established in different adult populations of alcohol abusers (O'Farrell, Cutter, Bayog, Dentch, & Fortgang, 1984). More recently, reliability has been extended to normal drinkers in the general population (Sobell, Sobell, Leo, & Cancilla, 1988) and in college student populations (20-28 years of age) (Sobell, Sobell, Klajner, Pavan, & Basian, 1986). Psychometric properties of the time-line technique need to be assessed in younger adult populations (i.e., under 20 years of age).

#### *Domain II: Behaviour Problems*

The Child Behaviour Checklist (CBCL) (Achenbach & Edelbrock, 1983) can be used to assess behavioural problems or disturbances in adolescents which might be associated with drug use and consequently which are important to consider in treatment. The emphasis is on overt measurable patterns of behaviour in adolescents that are not situationally specific. Results from the CBCL can provide concurrent validity to assessments in other domains (e.g., school adjustment, psychopathology). Additionally, convergent validity about the adolescent's behaviour problems may be assessed by obtaining ratings from parents or teachers.

There are three versions of the CBCL. The adolescent provides information on: somatic complaints, schizoid traits, communication, maturity, obsessive-compulsive behaviour, hostile withdrawal behaviour, delinquency, aggression, and hyperactivity. The CBCL provides scores for the quality of social relationships, school adjustment, and work and recreation activities, as well as a total social competency index. Normative data are available for boys and girls between the ages of 11 and 16 years. The Youth Self-Report is a variation of the CBCL which can be used with older adolescents (11-18 years). In addition to social competency measures, this instrument assesses depression, social popularity, thought disorder, delinquency, somatic complaints, self-destructive behaviour, and aggression. A third variation of the CBCL has been

devised and standardized for use by parents and teachers (Achenbach & Edelbrock, 1986).

#### *Domain III: Physical Health*

An evaluation of the adolescent's physical health is necessary in the assessment and treatment of adolescent substance users (Tarter, 1988). It is important to consider whether any neurological conditions preceded the onset of drug abuse (e.g., attention disorder), if using drugs has heightened an existing medical illness (e.g., asthma), or whether medical complications could develop as a function of the method of drug use (e.g., AIDS and intravenous drug use). Moreover, the overall lifestyle of the adolescent drug user increases the potential for poor nutrition, disease, and injury.

A Health Status Evaluation (HSE) Form was developed for use by either physicians or physician assistants (Tarter, 1988). Users of the evaluation form should be aware of their legal responsibilities, particularly when collecting and disseminating information from HIV and pregnancy tests. Furthermore, it is not essential to collect all the information in the HSE. The time and costs involved in conducting such tests should be weighed against the clinical usefulness of findings.

#### *Domain IV: Psychiatric Disorder*

Psychiatric disorders can be a major etiological factor leading to adolescent drug use or may develop as a result of continual drug use. Thus, it is essential to record the existence, extent, time of onset, and previous treatment of psychiatric disturbances in order to understand their connection to drug use. Two concomitant strategies are recommended by Tarter (1988), including a psychiatric interview and a self-report measure of psychopathology.

The Diagnostic Interview Schedule for Children (DISC) records psychiatric symptoms occurring presently or up to six months previously, in addition to symptoms that had their onset at any point in the adolescent's past (Costello, Edelbrock, Dulcan, Kalas, & Klaric, 1984). An appealing feature of this instrument is that it may be administered by individuals with minimum clinical experience. Additionally, it is possible for a computer to score and diagnose results. Convergent validity of the diagnostic classification may be obtained by

administering and comparing results from the parent's and child's version of the DISC. Also, results from the DISC may be compared to the DSM-III criteria for a psychiatric disorder. Presently, the DISC is being revised to be comparable to the DSM-III(R) classification system by David Shaffer, M.D., at the Department of Psychiatry, Columbia University.

In addition to the psychiatric interview, or if it is impossible to conduct an interview with the adolescent or parent, a self-report instrument may be used to assess psychopathology. The adolescent version of the Symptom Checklist-90 (SCL-90) measures the presence and severity of psychological disturbances in areas such as obsessive compulsive behaviour, depression, anxiety, phobia, and paranoid ideation (Derogatis, Rickels, & Rock, 1976). In addition, scores are provided on a Global Severity Index, a Symptom Distress Index, and total Positive Symptoms.

#### *Domain V: Social Skills*

Tarter (1988) notes the importance of measuring the social and functional competency of the adolescent. He recommends using the Constructive Thinking Inventory (CTI) developed by Seymour Epstein. This instrument is currently being developed and psychometrically tested for its usefulness in assessing the skills needed for social adjustment in adolescents. To date impressive reliability and validity data have been obtained in studies conducted using older adolescents. The CTI consists of 90 self-rated items on a 5-point scale. There are six main content scales in addition to a deception scale. These scales include: 1) Estimated Coping; 2) Behavioural Coping; 3) Categorical Thinking; 4) Superstitious Thinking; 5) Naive Optimism; and 6) Negative Thinking. These combine into an overall Constructive Thinking score, which is highly correlated with self-acceptance and adaptive behaviour. In addition, the scales form three contrasting pairs: the first pair measures the degree to which the coping style is emotionally- or problem-focused; the second pair examines the thinking strategy in terms of discriminative analysis and realistic appreciation of situations; and the last pair measures the ability of the adolescent to draw inferences from experience in regulating behaviour.

Another scale which Tarter (1988) recommends for measuring social competency in adolescents is the Sources of Self-Esteem Inventory (SOSE) developed by Edward J. O'Brien. The SOSE consists of 116 self-rated items on a 5-point scale. (Shortened version has 77 items.) There are ten behaviourally-focused scales which measure bipolar dimensions of: 1) Competence; 2) Lovability; 3) Likability; 4) Self-Control; 5) Personal Power; 6) Moral Self-Approval; 7) Body Appearance; 8) Body Functioning; 9) Defensive Self-Enhancement; and 10) Identity Integration and Inner Conflict. A total score indexes global self-esteem.

Direct observational techniques can serve as a validation of self-report measures of self-esteem in adolescents. For example, Tarter (1988) recommends that adolescents be rated by clinicians or informants using a 5-point scale (absent to very good) to measure interpersonal skills such as: 1) Eye contact; 2) Smile; 3) Duration of verbal responses; 4) Verbal elaboration or richness of language content; 5) Latency in responding in verbal interactions; 6) Affect; 7) Body gestures during interpersonal interaction; 8) Expression of regard for the welfare of others; 9) Spontaneous communications; and 10) Expression of appreciation. A total interpersonal skills score can be obtained by totalling scores on each skill area.

#### *Domain VI: Family Functioning*

The family is an important source of promoting socially normative behaviour and for guiding the transition from adolescent to adulthood (Tarter, 1988). The family can also serve as an ally in the treatment of adolescent substance users. Consequently, the assessment of family functioning is an important component of the assessment and rehabilitation process.

There are numerous ways to assess family functioning depending on whether the target is the whole family, marital, parent-child, or sibling relationships. Jacob and Tennenbaum (1988) provide an extensive review of family assessment procedures, including, for example the Family Assessment Measure (FAM) (Skinner, Steinhauer, & Santa-Barbara, 1983) and the Family Adaptability and Cohesion Evaluation Scales (FACES III) (Olson, Sprenkle, & Russell, 1979).



Tarter (1988) recommends using the FAM to provide a comprehensive profile of the functioning of the family unit. Three interdependent scales are used, including: 1) General Scale — a 50-item scale to assess family functioning across seven dimensions: a) Task Accomplishment, b) Role Performance, c) Communication, d) Affective Expression, e) Involvement, f) Control, and g) and Norms; 2) Dyadic Relationship Scale — a 42-item scale derived from the seven dimensions in the General Scale which outlines the quality of relationships between specific pairs (e.g., mother and child); 3) Self-Rating Scale — a 42-item scale that measures each member's perception of his/her functioning in the family according to the dimensions used in the General Scale. Norms for normal families are provided in the FAM III Administration and Interpretation Guide and those for clinical families can be obtained from the author, Dr. Harvey Skinner. In general, studies using this instrument have reported good reliability and validity (Skinner, 1987).

Alternatively, the present authors recommend using the FACES III to assess whole family functioning. The instrument has 20 items (5-point Likert scale) which assess two primary dimensions: Cohesion and Adaptability of family functioning. Five concepts are included under the Cohesion dimension: Emotional Bonding, Supportiveness, Family Boundaries, Time and Friends, and Interest in Recreation. The Adaptability dimension has four concepts: Leadership, Control, Discipline, and Roles and Rules. Family members complete the FACES III twice in order to measure the discrepancy between an individual's perceived family score and his/her ideal family score. The instrument has good reliability, validity, and clinical utility.

#### *Domain VII: School Adjustment*

At school the adolescent gains both the fundamental intellectual skills needed to function in society and the necessary interpersonal skills for dealing with others (Tarter, 1988). Drug use can either promote or result from failure in these two areas. For example, drug use may lead to academic failure or academic failure due to learning disability can reduce the adolescent's self-esteem and lead to drug use in order to gain approval from non-normative peers.

Tarter (1988) suggests several ways to measure academic performance of the adolescent. The Wide Range Achievement Test can be used by a school psychologist as a measure of academic skill in the areas of reading, arithmetic, and spelling (Jastak & Jastak, 1965). In addition, information should be obtained from teachers regarding whether an adolescent is meeting academic objectives at a level which is compatible with his/her intellectual ability. An adolescent's chronological age and current grade level should be taken into account when evaluating any measures of academic achievement. Records of results from standardized achievement tests should be examined to assess changes in academic performance in the years prior to drug use. This cumulative information may provide convergent validity regarding the time of onset of problems.

The teacher's rating version of the Child Behaviour Checklist may be used to assess behavioural adjustment in the school environment (Tarter, 1988). (This instrument is described in Domain II.)

#### *Domain VIII: Employment*

The drive of the adolescent to seek employment is associated with a striving to assume adult roles and personal autonomy (Tarter, 1988). Successful adjustment in the workplace requires social and cognitive skills, and leads to positive feelings of a job well done as well as social acceptance by peers. Both these events serve to prevent alienation and consequent drug use.

Preparing the adolescent for a vocation is an important part of the school curriculum. Tarter (1988) recommends using the Generalizable Skills Curriculum protocol to find the best match between the adolescent's abilities (in mathematics, communication, interpersonal relations, and reasoning) and over 70 vocational options (Greenan, 1983). Self-ratings, teacher ratings, and direct performance measures are used in the evaluation.

#### *Domain IX: Peer Relationships*

Peer relationships are important to consider in assessing adolescent drug use. Tarter (1988) recommends using the Adolescent Problem Situation Inventory to assess the adolescent's ability to deal with high-risk social situations in which he/she is under pressure to succumb to substance use. This



instrument was developed by J. Hawkins and is still undergoing development. It is modelled after the already validated Problem Situation Inventory for Young Adults.

Alternatively, the Inventory of Drug-Taking Situations may also be used to assess the influence of others on drug use behaviour. (See Domain I for details)..

### *Domain X: Recreation*

The quality and quantity of recreational activities can affect the likelihood of the adolescent's involvement in drug use. In order to assess recreation, Tarter (1988) suggests that it is important to consider both an adolescent's level of fitness and attitude towards leisure. An evaluation of an adolescent's fitness can be done through a physical examination (e.g., body fat), laboratory measurements of health status (e.g., anaemia) and tests of exercise (e.g., respiratory capability). Attitudes toward leisure can be measured using the Individual and Group Counselling Step by Step instrument, developed by P. Edwards. Approximately 400 specific activities are assessed in the questionnaire and a corresponding manual is available which describes a leisure counselling program for adolescents. It should be noted that no normative data are available on this instrument.

## 3.0 CLINICALLY BASED CRITERIA FOR MAKING TREATMENT DECISIONS

Two clinically based methods for making treatment decisions with adolescents include that of the National Association of Addiction Treatment Providers (Weedman, 1989) and the Cleveland Admission, Discharge, and Transfer Criteria (Hoffman, Halikas, & Mee-Lee, 1987). Although empirical studies are needed to validate the criteria and decision rules, there are several advantages of using these approaches. Explicit decision-making criteria are provided for admission, placement, and discharge. This is aimed at achieving better consistency in making decisions about treatment services. Each component of treatment flows into the next, implying that there is continuity in treatment services. Criteria for assessment, placement, and discharge are comprehensive and include factors other than drug dependence (e.g., psychosocial functioning).

### *2.2.3 Treatment Matching and Referral*

Tarter (1988) suggests that treatment needs should correspond to the type and degree of physiological and psychological problems identified in the diagnostic assessment. Treatment issues are outlined in relation to the ten assessment domains previously described. For example, under Domain I: Substance Use, he suggests that treatment may vary from emergency medical care for acute intoxication to drug education programs for rehabilitation.

A method of developing a directory of adolescent services is outlined (Tarter, 1988). This method may be used to identify and describe the resources available for adolescents in a given community and to organize this information into a customized referral guide. There are six steps in developing this directory: 1) generate a list of local adolescent service facilities and programs; 2) contact providers; 3) mail the provider information form to participants (this form has participants describe the key characteristics of their program); 4) conduct follow-up interviews with providers; 5) develop an adolescent services matrix, with names of the programs on the left side and facility/program characteristics along the top.

### *3.1 NAATP and Decision Rules*

The National Association of Addiction Treatment Providers, under the direction of Richard D. Weedman, developed the manual *Adult and Adolescent Alcohol and Drug Dependence Admission, Continued Stay, and Discharge Criteria* (Weedman, 1989). The main purpose of this manual was to establish criteria for determining: 1) when an adult or adolescent should be admitted into treatment; 2) the type of service to be provided; 3) the recommended length of stay; 4) whether a client should continue treatment; and 5) when a client should be discharged from treatment.

A distinction is made among four types of clinical services:

1. *Inpatient Detoxification (Secure) Services:* provide acute detoxification and treatment for acute emotional, behavioural, and/or physical distress as a result of a client's alcohol and/or drug use.
2. *Residential Rehabilitation Services:* provide residential rehabilitation aimed at permanent changes in a client's alcohol and/or drug use.
3. *Partial Hospital (Intensive Outpatient) Services:* in addition to changes in a client's alcohol and/or drug use, the partial hospitalization program is aimed at reducing problems resulting from his/her substance use.
4. *Outpatient Services:* aimed at helping the client change his/her alcohol and drug use attitudes and behaviours and also to better his/her general lifestyle which can influence substance use.

Table 4.3 outlines the components of this decision-making method by the four types of services. For admission into any one of these treatment services an adolescent needs to be diagnosed as having a dependence disorder as defined by the American Psychiatric Association DSM-III-R. Other considerations are accounted for in deciding which service an adolescent would most benefit from. These may include: medical complications, psychiatric complications, environmental complica-

tions, emotional/behavioural functioning, family, social, academic dysfunction, specific developmental disorders, maturation level, and global assessment functioning. Criteria for maintaining a given level of service for an adolescent or for discharging him/her from treatment may include: medical stability, emotional or behavioural functioning, and degree of resolution concerning a client's drug problem.

To illustrate how this method works, let's consider a "typical" male adolescent in an inpatient (secure) service (Table 4.4). To be admitted, this client has had several drug dependence symptoms over the past month or more, such as: 1) constant need to cut down or control the use of alcohol and/or drugs; 2) avoidance of important social, educational, or recreational activities because of alcohol and/or drug use; and 3) marked tolerance of alcohol and/or drugs. His physical and cognitive maturation level is at least 11 years of age. He falls into at least one category of problems resulting from drug use (e.g., family, social, and academic problems). Based on an average admission criteria score, the length of stay for this client is about 35-45 days. Treatment will continue if he is diagnosed as dependent and meets at least one criterion for continued stay (e.g., major medical complication is affecting his health). Finally, this client would be discharged from inpatient (secure) services when, for example, he does not meet any diagnostic criteria for drug dependence.

**TABLE 4.3**  
NAATP Components by Type of Service

| Type of Service       |                             |                               |                     |            |
|-----------------------|-----------------------------|-------------------------------|---------------------|------------|
|                       | Inpatient<br>Detoxification | Residential<br>Rehabilitation | Partial<br>Hospital | Outpatient |
| Components            |                             |                               |                     |            |
| Admission<br>Criteria |                             |                               |                     |            |
| Length of<br>Stay     |                             |                               |                     |            |
| Continued<br>Stay     |                             |                               |                     |            |
| Discharge<br>Criteria |                             |                               |                     |            |

**TABLE 4.4**  
**Example of NAATP Adolescent Admission, Continued Stay, and Discharge Criteria**  
**for Inpatient Services (from Weedman, 1989)**

| Component  | Adolescent Inpatient (Secure) Services   |   |
|--|--|---|
| Admission Criteria                                   | A. Diagnosis of Dependence<br>B. Maturation Level<br>C. Problem Categories <ul style="list-style-type: none"> <li>- Alcohol and/or Drug Withdrawal</li> <li>- Medical Complications</li> <li>- Emotional/Behavioural Status</li> <li>- Family, Social, Academic Dysfunction</li> <li>- Specific Developmental Disorder</li> <li>- Global Assessment Functioning</li> </ul> |   |
| Recommended Length of Stay (Based on Activity Index) | <u>Score</u><br>3-8<br>9-16<br>17-23   | <u>Length of Stay</u><br>21-35 days<br>35-45 days<br>45-60 days |
| Continued Stay Criteria                              | A. Diagnosis of Dependence<br>B. Factors for Continued Stay: <ul style="list-style-type: none"> <li>- Alcohol/Drug Rehabilitation/Habilitation Complications</li> <li>- Alcohol/Drug Withdrawal Complications</li> <li>- Major Medical Complications</li> <li>- Emotional/Behavioural</li> <li>- Developmental Status</li> </ul>   |   |
| Discharge Criteria                                   | A. Diagnosis of Dependence<br>B. Alcohol/Drug Habilitation/Rehabilitation<br>C. Emotional/Psychiatric or Medical Complications<br>D. Cognitive Functioning<br>E. Behavioural Factors   |   |

### *3.2 Cleveland Admission, Discharge, and Transfer Method and Criteria*

The Cleveland Criteria are guidelines for placement of clinically dependent adolescents (Hoffman, Halikas, & Mee-Lee, 1987). The criteria were developed for the Northern Ohio Chemical Dependency Treatment Directors Association by a team of professionals affiliated with the Chemical Abuse/Addiction Treatment Outcome Registry (CATOR)/Ramsey Clinic. The team was headed by Norman G. Hoffman, Ph.D., the Executive Director of CATOR.

Six possible levels of care are identified:

1. *Mutual/Self-Help*: provides mutual/self-help support through organizations such as Alcoholics

Anonymous, Alateen, and other self-help groups.

2. *Low Intensive Outpatient Program*: provides brief educational and therapeutic programming, such as weekly evening sessions, to facilitate aftercare.
3. *Intensive Outpatient Program*: provides structured after-school counselling for three or more hours per day, e.g., individual, peer and group therapy.
4. *Day Treatment Program*: a day-long program in which an adolescent receives special schooling along with individual, peer, and group counselling.

5. *Residential Program*: a medically supervised, intensive inpatient treatment program for adolescents with significant chemical use problems.
6. *Locked Key Unit*: a medically managed, intensive inpatient evaluation unit for adolescents with acute levels of intoxication, withdrawal, or other physical and/or psychiatric conditions.

Table 4.5 outlines the diagnostic dimensions found in the Cleveland Criteria Checklist (Hoffman, 1987). These criteria are used to classify adolescents into treatment levels after they have first been diagnosed as having a psychoactive substance use disorder, as defined by DSM-III-R or other standardized criteria. An adolescent should be placed into the highest level of care required as diagnosed

by any one dimension. For example, a typical patient in a day treatment program (Level 4) has no withdrawal symptoms; no significant physical or psychiatric complications; episodes of loss of control; significant life area problems; and a need to be free from distractions to focus on recovery. Two other factors are vital in making treatment decisions, namely: prior treatment failure, and the availability of care facilities. Failure at any level of care signifies the need for treatment at a higher level of care. If the ideal level of care is not available, then it is suggested that the next-higher level of care available should be used.

Empirical studies are needed to validate the Cleveland Criteria. In addition, research is currently under way to combine NAATP and Cleveland Criteria.

**TABLE 4.5**  
**Diagnostic Dimensions and Levels of Care for the Cleveland Criteria**

|                                    | Levels of Care           |  |   |                                |                             |                             |
|------------------------------------|--------------------------|--|---|--------------------------------|-----------------------------|-----------------------------|
|                                    | I<br>Mutual<br>Self-Help | II<br>Low Intensive<br>Outpatient<br>Program | III<br>Intensive<br>Outpatient<br>Program | IV<br>Day Treatment<br>Program | V<br>Residential<br>Program | VI<br>Locked<br>Key<br>Unit |
| <b>Diagnostic Dimensions</b>       |                          |  |   |                                |                             |                             |
| 1. Acute Intoxication Withdrawal   |                          |  |   |                                |                             |                             |
| 2. Physical Complication           |                          |  |   |                                |                             |                             |
| 3. Psychiatric Complication        |                          |  |   |                                |                             |                             |
| 4. Life Areas Impairment           |                          |  |   |                                |                             |                             |
| 5. Treatment Acceptance/Resistance |                          |  |   |                                |                             |                             |
| 6. Loss of Control/Relapse Crisis  |                          |  |   |                                |                             |                             |
| 7. Recovery Environment            |                          |  |   |                                |                             |                             |



#### 4.0 CONCLUSION

The growing interest and concern about adolescent drug use underscores the need for more systematic assessment. This need is evident in the call for diagnostic criteria that take into account unique features of adolescent drug use, the development of comprehensive assessment instruments that are designed specifically for use with adolescents, and the specification of criteria and decision rules for matching clients with different types of treatment. Considerable progress has been made in the last few years in the development of comprehensive assessment models (e.g., CDAAP and NIDA) as well as in the development of criteria for treatment placement (e.g., NAATP and Cleveland Criteria). Indeed, the assessment instruments and treatment criteria in Tables 4.1 - 5 provide excellent building blocks.

However, these assessment instruments and assignment criteria require further testing and evaluation. This evaluation should take place at multiple sites and include major components of the instruments and criteria described in Tables 4.1 - 5. A practical aim of this exercise would be to identify a core set of instruments and decision criteria that have been carefully evaluated against treatment outcome. Then, this "core" assessment model could be recommended for broad adoption in a variety of health, social service, education, and justice settings. In addition, such a program of research would yield

vital information regarding critical issues raised at the beginning of this chapter (e.g., what are the most appropriate diagnostic criteria for adolescent drug use?). Thus, our primary recommendation is for national funding bodies in Canada (e.g., Health and Welfare Canada) and the United States (e.g., National Institute on Alcohol Abuse and Alcoholism, and National Institute on Drug Abuse) to sponsor a five-year multi-site trial of a comprehensive assessment model for adolescent drug use.

In the interim, we strongly urge practitioners to adopt a systematic assessment process for the detection and assessment of adolescent drug use. Instruments and criteria included in the model should focus on the severity and extent of drug use and related problems, have data supporting the reliability and validity of the methods, be appropriate for use with adolescents, and be clinically useful. The assessment process should follow a sequential model with four stages: 1) identification of alcohol/drug use with adolescents in a variety of community settings; 2) a comprehensive assessment of major areas of concern; 3) assignment to a specific treatment using criteria that take into account the nature and severity of problems; and 4) systematic follow-up of clients (e.g., at 1 year) to determine and monitor the outcome of treatment. In brief, a call is made for the standardization of assessment practices.

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**CHAPTER 5:**  
**INTERVENTION METHODS FOR YOUTH**  
**WITH PROBLEMS OF SUBSTANCE ABUSE**

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The views expressed in this paper are those of the authors and do not necessarily reflect those of the Addiction Research Foundation.

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## INTRODUCTION

In this chapter we review the literature on treatment of youth with problems of substance abuse. Interest in this area increased very rapidly in the 1960s and 1970s, fuelled by a rapid increase in illicit drug use, particularly among the young. Most research attention has been focussed upon the adult user, since the majority of those presenting to treatment facilities were young adults. Although drug abuse among youth and adolescents has become a focus of attention in the present decade, it remains a relatively undeveloped area of empirical research. Since the scientific literature is limited, the more substantial literature on treatment of adults will be drawn upon here to delineate some promising directions for further work.

The chapter will be composed of nine major sections:

- 1) To begin, we address the issue of defining substance abuse among youth, and offer empirical and theoretical arguments for the assertion that definitions of abuse in this population should be more conservative than those applied to adults.
- 2) We review the characteristics of youth receiving treatment for substance abuse, and outline the variety of other problems that frequently complicate such cases.
- 3) The characteristics of clients outlined in the second section suggest that particular aspects of functioning should routinely be assessed in youth with substance abuse problems. Although consistent findings have emerged from group data, there is great individual variation, which requires attention to the unique characteristics of each client when formulating a treatment plan.
- 4) In this section we attempt to organize treatment approaches conceptually on the basis of two somewhat independent dimensions, which we term the Theoretical and the Procedural. The theoretical position one takes tends to determine an orientation

towards treatment, whereas procedural decisions relate to the selection of particular methods within a general orientation.

- 5) Because there have been very few controlled studies of treatment outcome in youth with problems of drug dependence, evidence on the relative effectiveness of treatment approaches is very sparse, and difficult to interpret.
- 6) A large number of outcome evaluations have permitted the identification of predictors of outcome from various types of programmes. The results of such studies can be rationally employed in attempting to match the characteristics of a client to the most promising treatment.
- 7) In this section we consider the range, nature, and advisability of the goals that are set in treatment of drug dependent youth. We suggest that tobacco use has tended to be neglected in considering the objectives of treatment, and argue that the issue is particularly relevant in this population, particularly if procedures for the secondary prevention of adolescent substance abuse are to be developed.
- 8) Research on the treatment of drug dependent youth is a scientific field in the early stage of development. The variety of apparently important, but little explored, research issues in the field is considerable. Here we delineate those questions that seem to be in most urgent need of attention, and on which promising avenues of investigation have recently opened.
- 9) Finally, we consider the complex ethical issues that surround research and treatment with youthful populations. Given the age of the clientele, the frequently troubled nature of their family environments, and the fact that most are engaged in illegal activities as part of the behaviour for which treatment is sought, these issues demand careful and independent review before treatment or research programmes are implemented.

### 1.0 DEFINING SUBSTANCE ABUSE AMONG YOUTH

Students of the addictions generally agree that the level of use of a psychoactive substance which is considered to constitute abuse is determined largely by the norms and values of the culture (Heath,

1988), which in turn are probably influenced by the biological and behavioural toxicity of the substance. Usually, where use of a drug is sanctioned among adults in a society, there are implicit rules pro-

scribing use by children. Such rules appear to exist because of common sense assumptions that children are ill-prepared to avoid immoderate use of the substance in question, and because of assumptions that use of the substance may be a biological hazard to the developing organism. Many of us were urged by parents or grandparents not to smoke "because it will stunt your growth," folk wisdom that has since been confirmed in the case of the foetus (United States Department of Health and Human Services, 1980). Nowadays more solidly empirical and horrendous reasons can be given.

On the basis of what we know of the risks to health and problems of drug dependence, it can reasonably be argued that, below certain ages, *any* non-medical use of *any* psychoactive drug constitutes abuse. However, the social acceptability of caffeine use, and until recently of tobacco use, by children indicates that this is an academic, not a societal view. Few would argue that all cases of abuse, however defined, should receive formal treatment. Hence, the definition of abuse deserving treatment inevitably becomes somewhat arbitrary. Nonetheless, there are theoretical, moral, and empirical reasons for arguing that the definition of such abuse among youth should be very conservative, *particularly when other environmental and psychological conditions place the person at elevated risk of serious drug dependence.*

One empirical method of defining substance abuse among youth is to examine the levels and patterns of drug use in youth receiving treatment. This can give some indication of the nature of drug abuse among youth, and can yield information about the range of levels associated with treatment admission. However, the levels of use reported in such groups is likely to be significantly higher than the levels most would use as indicating drug abuse.

Wilkinson, Leigh, Cordingley, Martin, and Lei (1987) have described the dimensions and typologies of drug use in a sample of youth and young adults (16-30 years old) admitted to treatment in Ontario. The patterns of drug use they observed varied in relation to the age of the subjects; although the predominant pattern was of multiple drug abuse, different types of multiple drug use were observed. In an extension of the study, Martin, Wilkinson, Cordingley, and Leigh (1987, August) compared the drug histories of youth (16-19 years) with young

adults (20-30 years). The types of drug abuse were distributed differently in the two groups. Among the youth group the predominant pattern was of involvement with cannabis, hallucinogens, stimulants, and alcohol. In the adults use of alcohol, narcotics, sedative-hypnotics, and tranquillizers was more prominent than among the youth, and in all drug classes, including those most prominently used by youth, the adults reported heavier consumption on the average (see Table 5.1, p. 5-17). We have interpreted this finding as indicating that drug problems tend to be manifested at lower levels of drug use in younger clients. This interpretation is concordant with the common sense view that the definition of substance abuse should be different for adults and youth.

Harrison and Hoffmann (1987) described the characteristics and outcome of a large sample of adolescents who received treatment in programmes in the U.S.A. that had contracted with CATOR, a fee-for-service clinical auditor. Affiliated programmes contract with CATOR for use of standardized data collection forms, follow-up interviews with their clients, data analysis, and report writing. Subjects of the study ranged in age from 12 to 19, with an average age of 16. By far the most prevalent frequent use of drugs was use of cannabis and alcohol, though use of multiple substances was frequently reported.

The results of the above studies are congruent with those of various other less detailed reports in indicating that among younger drug users in treatment the prevalence of problems associated with a particular substance is related to the prevalence of use in the population (Johnston, O'Malley, & Bachman, 1987; Smart & Adlaf, 1987). The drugs with which adolescents in treatment tend to be most involved are the "gateway" drugs identified in population studies as precursors of involvement with "harder" drugs (Kandel & Faust, 1975). In contrast, among adults in treatment, heavy use of the "harder" drugs is a much more prominent clinical problem. This difference in the clinical picture between youth and adults adds to other considerations suggesting the advisability of separating these groups for treatment purposes. Furthermore, the prominence of the "gateway" drugs in clinical groups of adolescents suggests that identification of any such drug use by an adolescent should prompt efforts to arrest and prevent further drug involvement.

## 2.0 CHARACTERISTICS OF YOUTH RECEIVING TREATMENT FOR DRUG DEPENDENCE

In addition to showing great variation in the level and pattern of their drug use, drug dependent youth vary in a number of clinically important dimensions, on which, as a group, they appear to differ from the general population of youth.

### 2.1 Sex

The distribution of the sexes in the clinical population shows a consistent overrepresentation of males relative to the general population, and overrepresentation of females relative to the population of adults in treatment for drug dependence (Harrison & Hoffmann, 1987; Holland & Griffin, 1984; Martin et al., 1987, August). These facts are of clinical significance, since they relate to the unique attributes that females bring to treatment (see below), and reconfirm the finding of elevated risk for males of problems of drug abuse.

In their study of adolescents in treatment, Harrison and Hoffmann (1987) documented a large number of gender differences, which are illustrated in Tables 5.2 and 5.3 (p. 5-18). Generally speaking, at intake to treatment, the females reported greater levels of psychological distress, a different profile of drug use, less acting out and academic problems, and more family problems, than did the males. Females were more successfully traced for follow-up, and tended to report better outcomes than the males. There was some evidence in the data that the gender differences that were observed were related to a general tendency for the females to admit to difficulties more readily than the males, rather than differences in life circumstances. For example, at intake the females were the more likely to identify substance abuse among other members of their family. However, at the end of treatment, when therapists rated the existence of familial substance abuse problems, on the basis of information gleaned from the clients and their parents, no sex difference was observed in the ratings of prevalence. Also, males admitting to difficulties at the start of treatment had a better prognosis than those denying, but the reverse was true for females.

Though there may be some effect of gender differences in preparedness to admit to problems, it is probable that many of the gender differences reflect different life experiences. This seems particularly

likely for the reported differences in rates of sexual abuse, and patterns of substance use. In the former case there are reasons for expecting to observe a difference, on the basis of societal incidence, and in the latter case there is no reason to expect an interaction between substance type and the incidence of over- or under-reporting.

The gender difference in reported incidence of parental substance abuse was independently observed by Wilkinson, Cordingley, Martin, and Lei (1987, August), who found that women were more likely than men to make such reports. They also found that women were overrepresented among the groups who were abusers of depressant drugs, particularly tranquilizers, and were underrepresented in the group abusing principally cannabis, hallucinogens, and stimulants. The latter group was mainly represented by males not reporting parental substance abuse. This finding seems consistent with the significant overrepresentation of boys among the frequent cannabis and hallucinogen users in the sample of Harrison and Hoffmann (1987), and the significant overrepresentation of girls among the frequent alcohol users in the same sample.

### 2.2 Family Problems

Because youth are generally more closely in contact with their families than are adults, it is reasonable to hypothesize that problems in the family will be more saliently related to a presenting behavioural problem in youth than in adults. This hypothesis is supported by studies of the nature of the problems identified in clinical samples of youth and adults (see, e.g., Holland & Griffin, 1984; Holmberg, 1985).

Among the family problems that are particularly salient among drug dependent youth are the presence of dependence among other family members (Harrison & Hoffmann, 1987; Wilkinson et al., 1987, August), the prevalence of family violence and sexual abuse particularly of the females (Potter-Effron & Potter-Effron, 1985), and the presence of seriously flawed patterns of family interaction and communication (see Stanton & Todd, 1982).



### 2.3 *Psychological Problems*

There is some evidence that youth with problems of drug dependence show a different, and possibly more severe, profile of psychopathology and psychological problems, when compared to drug dependent adults (Holland & Griffin, 1984). Among the males this tends to manifest itself in the form of behavioural acting out, delinquency, learning disabilities, school problems, and possibly minimization of their difficulties, or poor insight (Harrison & Hoffmann, 1987). Among the females, depression, self-denigration, and self-harm are particularly prominent and of prognostic significance.

Youth with problems of dependence tend to have positive expectancies of drug effects, due both to their personal experiences and vicarious learning. Both personal drug use and parental use are related to these expectancies (Brown, Creamer, & Stetson, 1987). These expectancies, in combination with the often harsh realities of the youth's life circumstances, probably combine to promote drug use, and possibly drug selection, and are thus of clinical relevance. Clearly, cognitive-behavioural formulations of drug abuse would indicate that alteration of such positive expectancies should form an important objective of treatment (Brown, 1985).

## 3.0 ASSESSMENT OF YOUTH WITH PROBLEMS OF DRUG DEPENDENCE

The issue of assessment is reviewed in a separate chapter. Hence, in the present section we do not address the issue of methods, but rather the content of assessment as it relates to the previous chapter section. Though general characteristics of this population have been identified with surprising consistency, we wish to emphasise that individual variability within the population is as salient an attribute as is the consistency of the group data. This point is illustrated with the use of data on patterns of self-reported drug use at admission to treatment for subjects from the study of Martin et al. (1987, August).

The subjects of the study were empirically classified into one of five typologies of drug user, on the basis of reported use of drugs, in the past year, from eight classes (alcohol, cannabis, hallucinogens, narcotics, sedative-hypnotics, solvents, stimulants, and tranquilizers: see Table 5.1). Within each of the five user typologies the frequency of reported drug use for each of the eight drug classes ranged enormously between the lightest and heaviest-using member of the group. For example, in the "solvent user" group the client reporting lowest drug use took 17 drinks

of alcohol, 3 joints of cannabis, 2 uses of narcotics, 1 of stimulants, and 1 of solvents in a typical two-week period. In contrast, the heaviest user in this type reported 88 drinks of alcohol, 80 joints of cannabis, 1 use of narcotics, 2 of stimulants, and 268 uses of solvents over the same interval. Similarly, in the "recreational drug user" typology the lightest user reported an average of 115 drinks of alcohol and 8 joints of cannabis over two weeks, whereas the heaviest user reported 144 joints of cannabis, 10 uses of a hallucinogen, and 8 uses of stimulants over the same interval. This great variability was seen in spite of the fact that our clients were quite homogeneous in age, and also in that all were prepared to accept either residential or outpatient treatment and none had frank psychiatric problems or required prescribed psychoactive medications. This variability illustrates that more than lip-service needs to be paid to the individualizing of treatment, based upon adequate assessment, since adolescent substance abusers also vary importantly on other dimensions, such as familial substance abuse, rebelliousness, depression, and sex, each of which can have implications for the treatment strategy.

## 4.0 VARIETIES OF TREATMENT APPROACHES

Approaches to treatment can be organized conceptually on the basis of two somewhat independent dimensions, which we term the Theoretical and the Procedural. The dimensions are somewhat independent because, although the theoretical (or ideological) position one takes determines an orientation towards treatment, it does not necessarily

determine the selection of a particular method. This can involve the selection of one or more of a variety of different techniques that derive from a particular theoretical orientation. For example, a person may conceptualize drug dependence as principally determined by processes of learning, but within the framework of Social Learning Theory opt for con-



tingency contracting in a residential treatment setting for client A, while using outpatient relapse prevention training with client B. Similarly, at the theoretical level one may view dependence as a psychobiological phenomenon, and opt for methadone maintenance as the intervention with client A, but use disulfiram in the treatment of client B. Thus, the theoretical orientation one has may lead to the favouring of a broad class of interventions, whereas Procedural decisions are shaped by the nature of the presenting case.

In a book by Lettieri, Sayers, and Pearson (1980) more than forty theories on drug abuse were presented. However, it is fair to say that far fewer theoretical orientations have significantly affected the nature of treatment approaches to drug abusing youth. Among the major theoretical approaches to drug dependence, at least the following can be identified as having directly influenced treatment approaches.

#### *4.1 The Disease Concept of Alcoholism*

Originally proposed by Jellinek (1960), and deriving directly from the ideology of Alcoholics Anonymous and the phenomenological reports of a large group of its adherents, the disease concept of alcoholism has been generalized as the disease concept of chemical dependency, and forms the theoretical underpinning of such organizations as Narcotics Anonymous and chemical dependency programmes employing the "Minnesota Model" (Cook, 1988a, 1988b). Incorporated into the practice and beliefs of those claiming adherence to this model are a number of ideological elements which Antze (1979) has identified as: the disease construct, "hitting bottom," the Higher Power, making a moral inventory, and "twelfth-stepping." The model attempts to relieve the guilt of the dependent person, while stressing the responsibility for self-initiated change in arresting the disease. Abstinence is perceived as the only tenable objective of such efforts, and great stress is placed on the mobilization of peer support through self-help networks. Cook (1988b) has reviewed evidence for effectiveness of this type of intervention in terms of the psychological constructs of conversion and persuasion. This analysis is congruent with the finding that AA and NA attendance is a good predictor of successful outcome in graduates of such programmes (Cook, 1988b; Harrison & Hoffmann, 1987).

#### *4.2 Characterological Conception of Drug Dependence*

The development of Synanon involved the amalgamation of many principles of AA into a therapeutic community for substance abusers, thus giving rise to one of the treatment methods that aims at profound psychological change in the character of the client as the basis of therapeutic effect. Therapeutic communities (TC) derived from this model have become a common treatment method for substance abusers, including youth (see reviews by DeLeon & Ziegenfuss, 1986, and Glaser, 1981). The treatment is characteristically long-term (more than six months, often as long as 15 months), and aims at the restructuring of values and personality on the basis of the community experience. A majority of the counsellors in such programmes are successful programme "graduates." Very often the treatment style involves fairly intensive group confrontation aimed at breaking down defenses that maintain addict values and attitudes.

A second approach with the same general objective of reorganizing deep personality structure is psychodynamically oriented psychotherapy. This approach has in common with the therapeutic communities both the general objective and the belief that long-term change is likely to require long-term treatment. The methods employed to this end are, however, quite different from those of the typical TC, often being nondirective and avoiding confrontation. Such treatment is often administered one-to-one in an outpatient service, but may involve an extended community living experience, particularly when applied to youth, for whom the group acts as a new "family" (Amini & Salasnek, 1975).

The psychodynamic approach can be said to pay greater heed to early experience and cognitions than does the TC approach, in which there is a greater emphasis placed upon the destructive influence of the addict subculture, its values, norms, and rationalizations.

#### *4.3 Psychobiological Approaches to Drug Dependence*

The view that drug dependence is a disorder having a biological basis implies the possibility of a biological solution. In medicine one of the most effective classes of biological solutions is phar-

macotherapy, and this model has been generalized to the treatment of substance abuse, with most notable success in the use of methadone to treat cases of abuse of opioid drugs (Dole & Nyswander, 1965). This approach has been less prevalent among youth than among adults, since opioid dependence is largely an adult phenomenon, although adolescent heroin addiction does occur (Millman, Khuri, & Nyswander, 1978). More generally, pharmacotherapies have tended to be avoided in adolescent substance abusers (Millman & Khuri, 1981), though they are used when certain diagnoses are made, such as Attention Deficit Disorder, which is often treated with stimulant drugs.

#### 4.4 Behavioral Conceptions of Drug Dependence

This orientation to the "addictive behaviors" involves interpretation of drug dependence as the product mainly of the learning history of the person. Cognitive Social Learning Theory (Bandura, 1986) is the most influential example of this approach (Wilson, 1988). Within this model it is assumed that, given certain biologically based individual differences, drug dependence can best be viewed as a learned behavior. As such it should be amenable to modification according to the same principles that govern all of human learning. The best described of these principles are those of conditioning, but in the last two decades cognitive factors have been added to the model. Some of the greatest controversy in the area of treatment has derived from the apparent conflict between views of dependence as learned behavior and disease conceptions.

Because there are various types of learned behavior, there are a number of Procedural options within this Theoretical orientation. These can range from attempts to extinguish conditioned reactions to stimuli signalling drug availability (O'Brien et al., 1988), through punishment of drug use in hopes of causing a conditioned aversion to the substance (Cannon, Baker, Gino, & Nathan, 1986), to structuring community reinforcement of abstinence (Sisson & Azrin, 1986), relapse prevention training (Marlatt & Gordon, 1985), behavioural self-control training (Wilkinson & LeBreton, 1986), and cognitive reappraisal (Sanchez-Craig, 1984).

This general approach lays great emphasis on the cognitive and environmental determinants of drug use, and on understanding these as a method of

gaining control over the unwanted behavior. In addition, because this approach has its roots in experimental psychology, advocates have tended to be more committed than most to the evaluation of programmes. Thus, given the prevalence of this approach in clinical practice, it is overrepresented in the scientific evaluations of treatment efforts; therefore one of the major impacts of this orientation has been the increase in awareness generally of the need for objective programme evaluation.

#### 4.5 Social Systems Theory

The general assumption of Systems Theory is that even pathological or apparently dysfunctional states and behaviours contribute to the stability of social systems (Pearlman, 1988; Stanton & Todd, 1982). Hence, if the "identified patient" alters his or her behaviour in the direction of better functioning, the other parts of the system will respond homeostatically to counter this change and return the *status quo*. Therefore, lasting change should involve change of the system as a whole, and the social system becomes the object of the intervention. This conceptual model has been most frequently applied to the social system of the family. Given the prominence of family problems among youthful drug dependent clients, advocates of this orientation see it as particularly relevant to that group (Quinn, Kuehl, Thomas, & Joanning, 1988; Stanton & Todd, 1982; Szapocznik, Kurtines, Hervis, & Spencer, F.1984).

At present there are few adequate comparisons between these diverse approaches as they have been applied to adults dependent on particular drugs, such as tobacco or alcohol, and none in relation to drug dependent youth. Clinical judgement, and some preliminary results, suggest that each of the approaches may be suited to subsets of the clinical population. As noted, there is great variation in the characteristics of drug dependent youth, and to assert that any single intervention is to be preferred as a generalized approach to the problem would be arrogant, empirically unjustified, and probably false. Current recognition of the complexity of drug dependence is exemplified by the readiness of most experts to characterize it as a multiply determined biopsychosocial problem. The task of researchers and clinicians in the field is to help convert this theoretical conviction into an empirically based clinical reality.

## 5.0 ASSESSMENTS OF THE EFFECTIVENESS OF TREATMENT

There are almost no experimental assessments of treatment efficacy in the literature on drug dependent youth, and even evaluation studies of treatment outcome are sparse.

### 5.1 Experimental Studies

Amini, Zilberg, Burke, and Salasnek (1982) compared the effects of intensive psychodynamically oriented psychotherapy in a residential setting with case management by a probation officer. The one amendment of usual practice in the probation control group was that the probation officers were all exclusively employed in the project and did not have any additional caseload. In the residential treatment (Amini & Salasnek, 1975; Amini, Salasnek, & Burke, 1976), a supportive social milieu was structured to function as the "new family" for the residents. Within this supportive milieu the therapeutic effort consisted of psychodynamically based psychotherapy. The clients stayed in treatment on the residential unit for several months (mean 132 days) and could, in some cases, stay for more than one year. The subjects of the study were adolescents with legal problems who had been identified as heavy users of drugs.

At 12-month follow-up there were essentially no differences in outcome between the group treated with residential long-term psychotherapy and the group receiving conventional case management from a probation officer. Both groups showed significant reduction in the level of drug use they reported, though few professed abstinence throughout the follow-up interval. On measures of drug and alcohol use there were no differences between the groups; the only reported difference was on a subjective measure of psychological well-being, on which the experimental group scored higher than the control. The authors speculated that differences might emerge with longer-term follow-up, but there are theoretical reasons for expecting the most pronounced differences between groups shortly after the intervention (Sanchez-Craig & Wilkinson, 1989).

Szapocznik and colleagues have made experimental comparisons between two forms of family therapy directed at reducing substance abuse in adolescent Hispanic clients (Szapocznik, Kurtines, Foote,

Perez-Vidal, & Hervis, 1983, 1986). The two treatments varied in the number of family members involved in the treatment. Despite theoretical reasons for expecting the opposite finding (Pearlman, 1988), the intervention involving a single family member appeared to offer both practical and outcome advantages over the more conventional approach of including several family members. As indicated above, the prominence of family problems among adolescent drug abusers is very high, so family treatment has clear face validity.

One difficulty with family work is the induction of the social unit as an entity into treatment (Stanton & Todd, 1982). In the studies by Szapocznik et al. (1983, 1986), a method of family therapy was developed involving only one family member without any loss of effectiveness. Thus, independently of the interesting, but weak, finding of better outcome for "one person" family therapy, the increased ease of engaging the family in treatment (by requiring only one family member to attend) may be a practical gain in itself. Recently, Szapocznik et al. (1988) have experimentally tested strategies for engaging families in the treatment process, and have shown significant gains in rate of engagement, and treatment completion, as a result of these techniques. Since retention in treatment is consistently one of the best predictors of outcome, these improved techniques of engagement should result in significant increases in treatment effectiveness.

Iverson, Jurs, Johnson, and Rohen (1980) employed different levels of an educational intervention, developed on principles of social learning theory, in an attempt to halt the further development of drug involvement (secondary prevention) in an adolescent group. No significant differences were observed between groups receiving different intensities of the intervention (number of education sessions), though the direction of observed differences favoured the briefer intervention.

In a group of young adults and adolescents (about 33%), Wilkinson and Martin (1983, December) compared the outcomes from two intensive 4-6 week residential, broad spectrum programmes using treatment based on social learning theory, with a brief (three-session) outpatient self-control training



(SCT) programme, also based on cognitive social learning theory. The two residential programmes involved identical treatment components, but differed in the method used to structure the milieu of the unit by means of contingency management. In one condition (GCR), access to "reinforcers" was made contingent on the average performance of the total client group, a procedure designed to maximize peer pressure in support of therapeutic change. In the second condition (ICR), access to reinforcement was made contingent for each client on his or her individual accomplishments in the programme, a method designed to maximize the extent to which the clients could attribute progress in treatment to their own efforts. The brief outpatient intervention (SCT) was based on methods developed for persons with alcohol problems (Miller & Muñoz, 1982; Sanchez-Craig, 1980, 1984), and focused mainly upon drug consumption (Wilkinson & LeBreton, 1986).

The investigators found that the GCR condition yielded a superior outcome to both the outwardly similar residential ICR programme and the brief, drug-use oriented, SCT treatment. On the other hand the latter treatments (SCT and ICR), although radically different in cost per client and in intensity, did not yield significantly different outcomes at one- and two-year follow-ups. An extension of these analyses revealed that the superior outcome from the GCR condition was observed in the subset of the clients who were adolescents (Niemi, 1988). This finding appears consistent with reports that peer pressure is the most consistently important influence on substance use among adolescents (Newcomb and Bentler, 1989).

These studies clearly suggest that, among adolescent substance abusers, treatment duration and location *per se* are largely irrelevant to treatment outcome, whereas apparently subtle variations in treatment *content* can result in significant differences in treatment effectiveness. Thus, debates about whether adolescents should "best" be treated as outpatients or in residential treatment seem to be based on the false premise that this dichotomy is useful in differentiating treatment approaches. Although such a distinction may be very significant in evaluating costs of programmes, it appears inadequate for addressing questions about effectiveness. The critical issue for those interested in improving the quality and effectiveness of services should be the sub-

stance of the treatment programme, rather than its intensity or duration. Some relatively brief and low cost approaches are clearly suitable for at least some clients. The identification of the characteristics of these clients and the refinement of methods of brief intervention deserve priority.

### 5.2 Evaluations of Treatment

Harrison and Hoffmann (1987) reported an evaluation of the characteristics of 1824 clients admitted to residential chemical dependency programmes that had contracted with CATOR for programme evaluation. Of this group 915 were eligible for a 12-month follow-up, and 54% of this sample were contacted for telephone interviews or by mail. The subjects who were not contacted for follow-up differed in a number of respects from those successfully contacted. Those not contacted contained significantly higher proportions of: males; non-whites; court-ordered referrals; persons suspended from or having dropped out of school; persons with a larger number of, and more severe, problems at admission; and dropouts from treatment. In short the group not followed was large and had much poorer prognosis, as indicated by review of the literature on predictors of treatment outcome. Since only about 50% of the sample were followed, the findings are unlikely to be representative of the sample admitted to treatment. Among the contacted clients, 44% reported abstinence for the year of the follow-up. The client variables that were predictive of attrition from follow-up (male, court referred, minority group member, etc.) were also found to be predictive of outcome status, as was completion of treatment, and attendance of AA or NA after programme completion.

DeLeon and colleagues have evaluated the outcomes of adolescent and adult clients of the Phoenix House Therapeutic Community (DeLeon, 1986; DeLeon & Deitch, 1985). They found essentially no difference in outcome between the two groups, although the younger clients who had been brought into treatment due to legal problems had poorer outcomes than other groups. Success rates were uniformly high among clients who "graduated," and these results were unrelated to age or primary drug, but for "dropouts," age differences were observed with the poorest outcomes associated with the younger group. There was also a tendency for clients with problems from drugs other than opioids to do less



well in the programme, but this may be partly explained by the criteria used to categorize outcome. Marijuana and alcohol abusers typically failed to achieve abstinence from their primary drug and thus failed to qualify for the most favourable outcome rating. These results indicate that therapeutic community treatment is not contraindicated for adolescents, and research should be directed to the identification of those clients most likely to benefit from this form of intervention.

Along with the large scale evaluations sponsored by NIDA [Drug Abuse Reporting Program (DARP), Treatment and Outcome Prospective Study (TOPS)], the programmes described above have shown considerable consistency in the characteristics of adolescent clients and their outcomes, although the CATOR evaluation is atypical in reporting a high frequency of abstinent outcomes. The norm has been to identify reports of greatly reduced drug use, but infrequent claims of abstinence from all psychoactive drugs. Generally, adolescents have fared no worse than adults in treatment programmes, although they appear to have a somewhat distinct set of problems, which suggests the advisability of establishing specialized pro-

grammes designed to address these problems as well as substance abuse. Also, given the high susceptibility of adolescents to social influence in regard to drug use (Clayton & Ritter, 1985; Kandel, 1974; Newcomb & Bentler, 1989), there are likely to be benefits to segregating adolescents from more dependent, more drug involved, and more criminally involved peers. Intravenous drug use is considerably less prevalent among adolescent drug users than adults. Measures designed to minimize contact of adolescents with the population of IV drug users are particularly desirable in light of the spread of the HIV virus through the sharing of needles.

The levels and patterns of drug use reported by adolescents in treatment programmes are significantly different, on the average, from those reported by adults. Among adolescents in North America, abuse of cannabis is particularly prominent, and the abuse of opioids and sedative-hypnotics is significantly less apparent. This difference, between the adolescent and adult populations, suggests that separation of the clients on the basis of type of drug use may be useful and would be strongly related to age.

## 6.0 PREDICTORS OF OUTCOME, AND MATCHING TO TREATMENT

A number of client and treatment variables have consistently emerged as predictors of outcome of treatment for drug dependence (Martin & Sobell, 1990). Client retention in treatment, in brief treatments as well as protracted ones, has consistently been found to be among the most potent predictors of outcome (DeLeon, 1985; Hubbard, Rachel, Craddock, & Cavanaugh, 1984; Simpson, Savage, Lloyd, & Sells, 1978; Wilkinson & LeBreton, 1986). The CATOR evaluation indicates that the finding holds as true for adolescents as it does for adults (Harrison & Hoffmann, 1987). Baseline drug use and initial response to treatment are also apparently predictive of outcome; this finding suggests that information indicating the advisability of changing the treatment strategy is often available early in the treatment process (Wilkinson & LeBreton, 1986).

Psychopathology is common in clinical populations of drug users and is predictive of outcome. The one category of psychopathology that is of particular predictive value is depression at the time of admis-

sion to treatment, especially among females. In the CATOR study, among the females, a suicide attempt in the past year was the most powerful predictor of poor outcome, and depressive symptoms also were related to poorer outcome. Among males, Anti-social Personality Disorder is the most commonly identified form of psychopathology, but has not been consistently related to outcome (Harrison & Hoffmann, 1987; Rounsaville, Kosten, Weissman, & Kleber, 1986).

Severity and chronicity of drug problems have been inconsistent as predictors of treatment outcome (Dolan, Black, Penk, Robinowitz, & DeFord, 1986; Rounsaville, Tierney, Crits-Christoph, Weissman, & Kleber, 1982; Sells, Demaree, Simpson, & Joe, 1978; Wilkinson & LeBreton, 1986), probably because the heterogeneity of drug use typologies and treatment programmes obscures interpretable interactions of the two types of variables. In contrast, a number of other life and psychological problems of clients have been related to poor outcome, as have been level of behaviour problems and criminality

(Harrison & Hoffmann, 1987; McLellan, 1983; Szapocznik & Ladner, 1977; Wilkinson & LeBreton, 1986). Females have tended to show superior outcomes, in studies where this variable has been examined. These results suggest hypotheses concerning the kinds of treatment to which certain client types might be matched in order to maximize the gains from treatment. In general, the more intensive treatment and costly programmes should probably be reserved for those with the more chronic and severe problems. Clients with earlier and less severe problems are likely to be as well served by more limited interventions as by more intensive procedures. This advice is entirely consistent with conventional clinical wisdom, but not with much clinical practice, especially with adolescents, who are sometimes treated in intensive residential programmes despite little evidence of extensive drug use (Worden, 1985). Since patients with relatively little drug involvement are likely to come into close contact with heavy drug users in such programmes, this accidental social contact may be more harmful than the treatment is beneficial, particularly given the susceptibility of adolescents to peer influence.

The susceptibility of adolescents to peer influence can be put to advantage by using group methods for treatment and by structuring the milieu so that peer pressure among the client group is most likely to be towards the general objectives of the treatment (Wilkinson & Martin, 1983, December; Wilkinson, Martin, Cordingley, & Leigh, 1989). Another

phenomenon that may relate to peer influence is the evidence that relatively homogeneous populations may have better treatment outcome than more diverse ones (Battjes, 1982-1983). This phenomenon may explain the unsuccessful outcome of small minority groups in the CATOR programme, particularly Native Americans. Ensuring relative homogeneity on the basis of ethnic origin may significantly increase the effectiveness of programmes, both by exploiting the enhanced effects of peer influence, and also by permitting the development of culturally relevant programming.

Some process research suggests that the kind of confrontative encounter that is often part of the Therapeutic Community model may be unsuitable to the type of drug user (consuming mainly cannabis and alcohol) most common among drug dependent youth (Waal, 1985). Holland and Griffin (1984) have challenged this interpretation, on the basis of their evaluation of the Gateway programme, but even the adolescents in their programme were likely to be involved in heroin use. DeLeon and Deitch's (1985) evaluation of Phoenix House is also inconsistent with the view that a confrontative approach is generally inappropriate for adolescent clients, but this research did show that failure to achieve abstinence was more common among marijuana and alcohol abusers than users of other drugs. It seems likely that user type is a more relevant variable than age in such "matching" effects.

## 7.0 THE GOALS OF TREATMENT

It is the avowed goal of programmes for drug dependent youth to induce in their clients abstinence from nonmedical use of all psychoactive drugs. This is probably because of three explicit or implicit considerations: 1) Abstinence is the treatment objective of most treatments for drug dependence (including alcohol) in adults. 2) All drug use by minors is illegal in most jurisdictions (with the general notable exception of inhalants). Thus, it would be unacceptable to counsel adolescents to engage in illicit behaviour, even if they wished to become "moderate users" of, for example, alcohol. 3) Drug use by children is generally unacceptable among adults.

Despite the objectives of treatment programmes, evaluations of treatment outcome in adult and mixed

client populations have revealed decreased, rather than discontinued, drug use as the most common outcome. Thus, although for adolescents the objective of treatment should be abstinence from all illicit drug use, failure to consider the possibility of greatly reduced, but continuing, drug use as a favourable treatment outcome can lead to an underestimation of the gains of treatment, when viewed from the perspective of decreased health risk. Such a perspective may be of particular relevance when considering drug use of adolescents and young adults, among whom both clinical and nonclinical studies suggest a good probability of gradual "maturing out" of the behaviour (Kandel & Logan, 1984; Masur, 1988, November; Wilkinson et al., 1989).

An anomaly in the treatment literature is the neglect of the relevance of tobacco use in adolescence to the development of other forms of drug involvement (Kandel & Faust, 1975), and its possible relevance to treatment programming for substance abusing youth. Given the role of tobacco use as a predictor of other drug use, and the high probability of subsequent dependence among those who start to smoke (McKinnell & Thomas, 1967), it is remarkable that little research has been conducted on interventions with cigarette using adolescents. Interventions with this group may have relevance as a method for preventing future health problems associated with smoking itself or with subsequent involvement with other hazardous forms of drug use. Some preliminary work has recently been reported on the treatment of adolescent tobacco users (Weissman, Glasgow, Biglan, & Lichtenstein, 1987), but such work has proceeded somewhat independently of the work on other adolescent substance abuse problems. Similarly, programmes for treatment of adolescent substance abusers rarely focus upon tobacco use, which is very prevalent, as one aspect of the drug dependence problem re-

quiring treatment. In the large CATOR programme (Harrison & Hoffmann, 1987), no mention is made in the report of tobacco use as a form of substance abuse, though the ages of the clients ranged from 12-19 years.

It would seem appropriate for treatment programmes to consider the advisability of routinely including the cessation of tobacco use as one of the goals of treatment for substance abusing adolescent clients. More generally, given the role of tobacco as a "gateway drug" (Kandel & Faust, 1975), programmes for early identification and secondary prevention of substance abuse among adolescents should give priority to tobacco use. Interventions which have as their objective the quitting of tobacco use by identified adolescent smokers would target the population at highest risk of other drug use, and would involve one of the most relevant target behaviours for interventions aimed at the secondary prevention of substance abuse generally among youthful populations. These gains would be added to the clear public health advantages of getting smokers to quit much earlier than is the norm.

## 8.0 RESEARCH NEEDS ON TREATMENT OF YOUTH

A number of consistent characteristics of drug dependent youth have recently been documented (see Section 2, above). For some of these findings it remains to be more rigorously confirmed that these characteristics do reliably differentiate drug dependent youth from other non-clinical groups. Furthermore, the possible role of these variables in relation to the development and maintenance of drug dependence needs to be assessed, so as to test hypotheses concerning their usefulness in matching clients to the most efficient and effective treatments.

Various treatment approaches reviewed in this chapter show promise in the treatment of adolescent substance abuse. For example, such interventions as training in procedures of self-control based upon Cognitive Social Learning Theory could be used to address family problems either conjointly or individually. The nature of the family from which the client comes is probably of relevance in selecting and specifying family interventions. Thus, the same family treatment approach may not be as appropriate for those clients who have one or more drug dependent parents as for those whose parents are not dependent. Similarly the level of maturity of the

client would weigh in opting for conjoint versus individual intervention. Various family treatment models are available, and various methods are available to mobilize peer pressure for therapeutic change. Young drug users with high levels of rebelliousness and use of opiates may benefit from confrontative Therapeutic Community treatment (DeLeon, 1986), and others with additional psychopathology are apparently quite unsuitable for this approach (McLellan, 1986). A priority for research should be the identification of consistent predictors of change in specific programmes, and the evaluation of the use of such information to test models of matching clients to treatment, as a method of improving outcomes.

Recent research indicates that the nature of substance abuse is different both qualitatively and quantitatively among young drug users (Wilkinson et al., 1987). The relevance of this variation to treatment approach should be investigated, particularly since preliminary findings suggest that heavy use of cannabis may be more readily treated than use of other types of drugs, particularly CNS depressants such as opiates, barbiturates, and tran-



quillizers (Wilkinson et al., 1989). Research on the patterns, levels, and typologies of multiple drug use among youth was conducted before the recent dramatic increase in the prevalence of cocaine use

among clinical populations in North America (Semlitz & Gold, 1986). The possible relevance of this change in drug use to patterns of adolescent use should be investigated.

### 9.0 ETHICAL ISSUES IN RESEARCH AND TREATMENT

As noted, drug dependent youth have multiple problems, frequently involving their families. Because of the ages of the clients, parents are often involved in consenting to the clinical procedures in which the youth participate, including research procedures. This fact raises delicate issues concerning the ethical responsibilities of clinicians and researchers, which deserve the attention of medico-legal ethicists. It is clear that the relationships of drug dependent adolescents with their parents are frequently complicated by drug dependence in one or more of the parents. Thus the clinician can be faced with two responsibilities that

appear to be in conflict, his or her responsibility to inform and involve the legal guardians of the young person and the responsibility to protect the privacy and welfare of the client. When the behaviour of a guardian probably bears directly on the clinical status of one's client, what should one do? In recent times this issue has been clarified in regard to physical abuse. Programmes where young substance abusers are receiving treatment should develop clear principles of operation in these matters for their staff and should ensure that they have full institutional support for the ethical suitability of the positions at which they arrive.



**TABLE 5.1**

**Mean Daily Frequency Of Use Of Drug Classes By Youth And Young Adult members Of Each Typology Of Drug User**

The young adults are heavier users than the youths regardless of user type and percentage of users in each group.

| DRUG USER TYPE (N <sup>1</sup> ,N <sup>2</sup> )  | DAILY DRUG USE               |                                    |
|---|------------------------------|------------------------------------|
|   | YOUTH<br>(Age 16 - 19 years) | YOUNG ADULT<br>(Age 20 - 30 years) |
| <b>ALCOHOL TYPE (5,23)</b><br>Alcohol   | 6.1                          | 11.3                               |
| <b>DEPRESSANTS TYPE (10,43)</b><br>Narcotics  | 0.3                          | 0.8                                |
| Tranquillizers  | 0.8                          | 0.9                                |
| Sedative Hypnotics  | 0.1                          | 0.3 *                              |
| <b>RECREATIONAL TYPE (50,50)</b><br>Cannabis  | 4.5                          | 6.7 *                              |
| Stimulants  | 0.3                          | 1.0                                |
| Hallucinogens   | 0.1                          | 0.1                                |
| <b>SOLVENTS TYPE (7,9)</b><br>Solvents  | 4.5                          | 7.6                                |
| <b>ADR TYPE (20,39)</b><br>Alcohol  | 6.4                          | 10.7 **                            |
| Cannabis  | 5.7                          | 7.1                                |
| Stimulants  | 1.8                          | 1.0                                |
| Hallucinogens   | 0.4                          | 0.5                                |
| Narcotics   | 0.5                          | 0.9                                |
| Tranquillizers  | 0.4                          | 0.9                                |
| Sedative Hypnotics  | 0.1                          | 0.4                                |
| N <sup>1</sup> — Number in "Youth" group<br>N <sup>2</sup> — Number in "Young Adults" group |                              |                                    |
| ** p < .05, * p < .10   |                              |                                    |

**TABLE 5.2**

Characteristics on which males and females differed at admission to the programme in the CATOR evaluation of treatments for adolescent substance abusers. From Harrison & Hoffman (1987).

- 
- Proportion of population in treatment
  - Involvement in religious activities \*
  - Learning disability or school problems
  - Legal problems
  - Illness or injury
  - Treatment for overdose \*
  - Psychiatric hospitalization \*
  - Emotional distress \*
  - Suicide attempts (past year) \*
  - Poor self-concept/self-image \*
  - Rating of quality of relations with family
  - Familial substance abuse \*
  - History of sexual abuse \*
  - Frequency of drug use
    - Alcohol \*
    - Cannabis
    - Stimulants \*
    - Sedatives \*
    - Nonprescription drugs \*
- 

\* Variables on which the females had higher mean value.

**TABLE 5.3**

Characteristics on which the male and female subjects differed during treatment and at follow-up in the CATOR evaluation. (From Harrison & Hoffman, 1987).

---

**WITHIN TREATMENT**

- Treatment completion \*
- Discharged for behavioral problems

**POST-TREATMENT**

- Referred to family therapy \*
  - Referred to individual counselling \*
  - Contacted for follow-up \*
  - Total abstinence reported at follow-up \*
  - Multiple relapses reported at follow-up
  - Pretreatment suicide attempt predicts poor outcome \*
  - Intrafamilial physical abuse predicts poor outcome \*
  - Positive pretreatment statements re self-concept predict poor outcome
- 

\* Variables on which the females had higher mean value.

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**CHAPTER 6:**  
**FAMILIES OF ADOLESCENT DRUG ABUSERS:**  
**SYSTEMIC INTERVENTIONS TO ATTAIN**  
**DRUG-FREE BEHAVIOR**

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## INTRODUCTION

Drug use in the adolescent community is a widespread phenomenon. The actual rate of drug use among adolescents varies somewhat across studies. It has been reported that 90% of students have used at least one substance by twelfth grade (Johnston, Bachman, & O'Malley, 1979; Millman & Khuri, 1981). More recently there has been a great deal of evidence that this rate remains significant, with alcohol predominant and marijuana continuing to be commonly available (Richards, 1981). Common occurrences of drug-taking in everyday life, personal observations and media reports, and motor vehicle violations while under the influence of drugs, suggest the pervasive nature of the problem. Herz (1985) succinctly summarizes the issue by stating "I for one, refuse to quibble over whether there are 20 million regular marijuana users or 30 to 40 million. The problem of drug abuse not only deserves, but compels, sensational media attention ... it demands thoughtful, intelligent, diligent, self-scrutinizing discussion, research efforts, law enforcement, education, and treatment service as well" (p.ii). Yet, given this situation, there has been little research inves-

tigating the effectiveness of treating nonopiate drug users (Tim & Holland, 1984).

Many adolescents who participate in drug-taking behavior do so for social acceptance, to compensate for interpersonal skill deficits, to rebel against authority such as parents and schools, or as one form of experimental behavior. Many of these adolescents are not addicted in the physiological or even psychological sense in every case, though some may rely on drugs to compensate for social deficits in a peer network or manage psychological turmoil around issues of identity and purpose. While these adolescents do not have an addiction which might require some form of institutionalization, their drug use does present serious problems. Some of these problems include threats to physical health, threats to others if they drive a motor vehicle, poor school performance, illegal activity, and postponement of crucial developmental task achievement such as identity development, interpersonal skill attainment, and the experience of autonomous behavior. It is the large group of non-institutionalized drug-abusing young persons who become the focus of our attention in treatment described in this paper.

### 1.0 A CONCEPTUAL OVERVIEW

We will briefly highlight some fundamental and previously discussed ideas which describe the conceptualization of treatment. Since these young persons are physically and economically connected to family systems, intervention can be a more positive agent of change if it includes the social context in which these adolescents live. The family as a social organization can be considered the unit of understanding and explanation related to the problem of drug abuse (Kaufman & Kaufman, 1979; Quinn, Kuehl, Thomas, Joanning, Howard, & Newfield; Stanton, Todd, & Assoc., 1982; Stanton, Todd, Heard, Kirschner, Kleiman, Mowatt, Riles, Scott, & Van Deusen, 1978; Stanton & Todd, 1979). Stated succinctly, "...many types of what may have traditionally been seen as individual problems (e.g., schizophrenia, heroin addiction) have been found to play a maintenance-type role, each functioning as a regulator for the family's organizing behavior ... thus, for the family, the presence of the symptom is a necessary condition for family stability and functioning, the organizing system is

too rigid" (Steier, Stanton, & Todd, 1982, page 1).

Some explicit treatment direction which accepts this family or social unit as the agent of change is needed. This includes utilizing the family not simply as a support group for the adolescent, not as a "parole board" in which adolescent changes in treatment are simply reported to parents, and not as the unit which receives educational information about drug risks and effects or recommendations for modifications of parenting styles. Instead, the family is the unit of treatment which addresses systemic changes or modifications, such as role negotiation and redefinition, modifications in interactional dynamics, or the potential of positive change in sibling behavior which could serve as a preventive attribute of treatment. The family is the "patient" because it is the social organization which admits a problem which it cannot resolve internally.

This paper will describe some systemic interventions which have been constructed to specifically address adolescent drug abuse in the family. We have chosen those therapeutic steps which we have found to be crucial in the early stages of treatment to functional change in the family. These steps have demonstrated their value across families in treatment which present with adolescent drug abuse as the "ticket" to therapy. To give life to the nature of these interventions, we will document these goals with vignettes which include actual transcript from therapy segments. We will specify the conceptualization of each vignette by describing a rationale for intervention and an explanation of its place in the overall treatment protocol. More elaborate descriptions of the theoretical breadth of this model can be found in the structural and strategic literature (Haley, 1976; Haley, 1980; Madanes, 1981; Stanton et al., 1982; Stanton, 1981).

It is crucial that the therapist have a map of a treatment journey in order to "know" how to process information received from the family. Pieces of information, factual reports and accounts of history, present family behaviors, and so on, can be determined as useful or not useful at the present moment depending on the map. The map of this treatment is constructed according to the relevant family and contextual goals of treatment. It is intended that interventions which comprise the map have a contextual base, compatible with family dynamics and previous family responses to treatment, including the status of drug behavior.

It should be pointed out that while drug abuse may be the family's initial presenting problem in treatment, other problems of equal or greater magnitude may exist. Some problems typically encountered include: (1) a stepparent and biological parent who may not yet have achieved some appropriate role definitions in the parenting context and thus may disagree and even argue, (2) marital problems may be acute and clearly obvious or disguised with intermittent weak or intensive emotional tremor, or (3) there may be drug abuse by another family member.

To shift the focus early in treatment from adolescent drug abuse to another problem such as one of these is not usually recommended. However, another problem may emerge which also threatens an individual's health. Some possibilities include: the

threat of physical or sexual abuse, severe parental drug or alcohol abuse, running away, pregnancy of an adolescent, or a suicide attempt. Any one of these possibilities may require immediate attention in the construction of an initial treatment plan. When valid evidence is presented by a family related to any other threat to a member's health or well-being, the therapist must take seriously the necessity for activating steps to protect such members. For the sake of brevity here, the reader is encouraged to refer to other sources which address these issues (Kaufman & Kaufman, 1979; Stanton et al., 1982). It is important to draw distinctions in gate-keeping information which (1) substantiates the life-threatening problems of a family member, or (2) is presented to obscure the presenting problem of adolescent drug abuse.

Unless a life threatening situation is apparent, an unnecessary therapeutic shift to another problem reduces the intensity of the presenting problem which dissipates the energy to resolve it. Further, confidence in treatment success is threatened. The opportunity to attend to such systemic features successfully is enhanced when it is done within the context of working on the adolescent drug problem. Therefore, most therapeutic activities must frame drug abuse as the central issue through which to address the systemic patterns in which the presenting problem may be embedded (Landau & Stanton, 1983). Otherwise the family begins to question the therapist's motives which threaten the therapeutic alliance. Thus, the attainment of drug-free behavior is contextual in that it is both a *family* and *therapeutic* goal.

### *Step 1. Therapist-Family Relationship*

The establishment of the therapeutic alliance is the embodiment of all transactions in treatment. Therapists are familiar with the range of behaviors, attitudes, and techniques which are most productive, and each has developed a familiar personal style which most comfortably and authentically promotes such an alliance. Thus, while this alliance is a necessary condition of treatment, its formation varies across therapists.

As the formation of this treatment alliance involving the family members and therapist takes shape, there are some particular elements of this partnership in drug abuse treatment which are most salient. We



will identify these elements, although the context of the actual case material which would document such maneuvers will be embedded in subsequent vignettes illustrating other therapist activities.

The elaboration of these concepts related to alliances has been sufficiently addressed in the literature. Those relevant to this treatment model include joining and accommodation (Minuchin & Fishman, 1981), nonblaming and noble ascription (Stanton et al., 1982), persuasion and healing, establishment of mutual investment and collaboration, convening strategies (Stanton et al., 1982; Teismann, 1980), and humor, warmth, and self-disclosure (Tolan, Cromwell, & Brasswell, 1986).

These convening strategies are particularly crucial since some of the elements of families with adolescent drug abusers can sabotage efforts to engaging the larger family system. As they pertain to drug abusing families, characteristics include: an adolescent in a higher position of authority than the parents who gives a mandate to the family not to attend, a disorganized family structure which prohibits the formation of a plan to attend, and a “stonewall” policy of the parents who claim that the entire responsibility for change rests with the adolescent (or therapist).

Some therapeutic responses to counter such problematic family postures have been effective. One, framing the first meeting as a “pre-treatment interview” helps reduce possible defensiveness and provides a comfortable atmosphere. Two, conducting a first meeting with only the parents to discuss convening strategies helps promote parental influence. Three, explaining the potentially negative outcomes of refusing treatment (i.e., more severe drug abuse, destructive or criminal behavior, threat to physiological well-being, and financial hardship) can be constructive counter-moves to engage the family in treatment.

One further step taken in promoting a therapeutic alliance is one utilized throughout treatment. It is most conducive to adolescent circumstances to illuminate issues of which an adolescent has a perceived stake. A contextual treatment goal here is to highlight an issue which stirs the family, rather than by a therapist “pulling” information from the young person (i.e., “Tell us why you are angry!”; “What are you angry about?”; “We cannot help you

if you don’t tell us why you are sad.”). This latter category of statements typically serves to seal the shell which the adolescent has constructed. This silence in treatment is an action which attempts to paralyze, or sabotage, treatment. The tactic serves to sidestep the intensity of the concern, fear, or responsibility of the drug problem. Thus, an appropriate action in this family drama is to probe the family and arouse emotional systems, thereby prompting an adolescent urge to be heard, to defend, or to criticize. In this way a dialogue or argument can ensue which can lay open the concealed feelings and problem solving paralysis. We view this as growth-producing for adolescent development.

### *Step 2. Parental Coalition: Unity and Strategy*

We have found that parental unity is not usually evident in families with a drug abusing young person. This finding is not surprising given the comprehensive description of the pragmatic treatment model developed by Haley and Madanes regarding drug abuse, troubled young persons, and adolescent development (Haley, 1976; 1980; Madanes, 1981; Quinn, Newfield, & Protinsky, 1985; Roberts, 1982). There is an unbalanced interactional style around some dimension of the parental executive subsystem, such as an under-involved-overinvolved combination, a single parent with no coalition with another adult, or collusive pacts which the parents have made, such as an admission of incompetence, or a denial of the seriousness of the problem. The final result of this predicament as it pertains to drug behavior is that the adolescent is implicitly given permission to drive wedges between parents or make unilateral decisions thereby avoiding the responsibility of being accountable to those parents. We offer the reader our experience with several facets of this family structure:

#### *a. Getting serious: Push toward parental competence*

Therapist (Th) (to Brice (B), the 14 year old sibling):

What does mom do when she gets upset?

Mother (M): I get mad.

Debra (D) (15 year old identified patient): She looks mean (teasingly).

B.: She reads the newspaper (laughing).

D.: She beats us with a mop (laughing heartily, Mom chuckles as well).

D.: Mom gets so upset she talks to the dog (both daughter and Mom laugh).  
 Father (F) (to therapist): Should we bring the dog in next time? (cynically).  
 M.: She wanted to come.  
 Th: Well, does the dog need some tutoring in English too?  
 M: Well, she sings and tells stories.  
 D.: Well, let's talk about the dog why don't we! (sarcastically).  
 Th (therapist, to father): Well, what do you think? The family is falling apart? You've got kids that are using drugs and alcohol and one flunking school (therapist shifts the focus and highlights the seriousness of the problem).  
 B: I'm not on drugs, just a little drinking.  
 Th (therapist leans forward toward mother): What impresses me is that you don't seem all that concerned about it (drawing out a more intense focus on the problem).  
 M: But we're here.  
 Th: But you're joking about it (keeping the focus).  
 M: That's so I won't cry.  
 Th: We need to talk about what to do about the problem.  
 M: That's all we can do is talk, we can't make decisions for them, we can't follow them around, I can't force them to stay home.  
 Th: But it looks like what you've tried — the talking — hasn't worked.  
 M: No.  
 Th: Does the mop work? (therapist highlights absurdity of current class of parental solutions).  
 M: (laughs).  
 Th: What do you do when you really mean business?  
 M: (being silly to defuse the intensity and disclaim her ineffectiveness) Use spoons (laughingly) (the therapist ignores this comment, the mother gets serious). I cry or curse.  
 F: I just raise my voice and yell.  
 Th: (Attempts to examine their ineffectiveness and frustration as parents) (to Mom) Do you think your husband's solution works?  
 D: Not really.  
 Th: So you (to mom) curse and cry, (to father) and you turn it in and get headaches and nausea, that's what you said last week. Do you ever talk about the futility of all this?  
 F: Well, give us another method to try (pleading incompetence).  
 Th: These are things that worked before that don't work now.

M: So do we set consequences?  
 Th: Talk to your husband about that.  
 D: I'm going to the bathroom (B also gets up) (therapist uses this cue to also get up and leave the room to underscore the urgency of resolving the problem and to promote parental unity).  
 Th: I'll be back in five minutes.  
 Th: (returns) I'm talking about coming up with something that gets their attention. I know you love them, but your way of showing them isn't working.  
 Kids return.  
 M: Is it too harsh if I ...  
 Th: We can't talk about this now. It is really important that the two of you get together. You must do whatever it takes to get everyone back (to therapy). Your daughter is upset and she might feign sickness or plan to get lost or claim she forgot so she can get out of coming (therapist predicts Debra's possible schemes).  
 M: Yes, we have set up choices — coming here or her going into a place for treatment — so she will come.  
 Th: You need to keep doing that — that's good.  
 D: (remains standing and fuming)  
 Th: See you next week.

In this case two adolescent siblings, one year apart, were together accepted as the problem. While they each had a distinct family role, which is often the case requiring therapeutic consideration (Cleveland, 1981), for the purpose of emphasizing parental unity the children were regarded as the sibling coalition requiring parental attention.

### *b. Parental action.*

Once the parents agree to work in unity toward resolving the present problem, the therapist must coax the parents into action by injecting hope and a sense of capability. However, unless the parents demonstrate this newly discovered sense about themselves in the presence of the adolescent, the family goal of parental effectiveness has not been achieved. The following illustration documents the attainment of this goal.

Henry (Father): Jeff (adolescent drug abuser), Mother and I talked about it. Daryl (therapist) made us come to a decision while we were here and you were in the other room. I think it's unfair, first of all, that you put us to the test, and

we're very disappointed. You're not going to get any more gas money from us, Jeff, for the next, uh, well we don't know about that. We're taking the credit card away, and you'll be able to drive only to and from work. After work you will bring the truck home and it stays in the driveway. At the end of the two week period we're going to have another urinalysis, and if what you said is the truth (not having smoked marijuana in two weeks) about the last time you had any dope, then we'll discuss what to do with the truck at that time. If it comes out positive, Jeff, I guarantee you we're selling the truck. And you understand you're just going to be driving to and from work. You're to go to work in the morning, and when you come back in the evening the truck stays at home.

Rita (Mother): And we need to clarify that that includes the other vehicles at the house. You have no wheels. You can't use the Camaro or dad's car.

Henry: And you're going to have to find a way to get around if you're going out in the day, for two weeks. I just hope to God that your urinalysis comes out negative, otherwise your truck is history. (The volume and sense of urgency in Henry's voice increases, he now realizes how he has been manipulated by his son). And you want to know something? It really, I hate to do that, but I want to tell you something, Mom and I feel that strongly about it. And this hasn't been a game coming to these sessions. We're not here to get any credit hours for school. We're serious about this, Jeff, and we've compromised because we're giving you the benefit of the doubt on the consequences we have set. So, how it shows up (the urinalysis) in two weeks we'll know how to go from there (whether to sell the truck or not).

Th: Rita, do you have anything you want to add to that?

Rita: No, I feel much the same way.

It is apparent that at this juncture the parents have taken responsibility for change in their son's behavior, and expect the son to follow suit. The parents exhibit their unified stance, and establish and convey explicit expectations and consequences related to their son's drug behavior. It is now a decision of the young person, comply or continue drug behavior and anticipate inevitable and clear consequences.

### *c. Raising intensity around a positive urinalysis.*

Drug screens can be effective for at least two reasons: (1) they serve as an evaluation method of drug status, and (2) their outcomes can be utilized in treatment by serving as a catalyst toward commitment to resolving the problem. These screens must be recognized as indicators, not necessarily as proof, in that false positives and false negatives can occur (Morgan, 1984). We have written about this in more detail elsewhere (Thomas, Quinn, Kuehl, Newfield, Howard, & Joanning, in press), and have discussed the necessity for considering the adolescent's self-report and the family's report of drug use as valid indicators as well. However, a urinalysis is considered by most families to be "scientific proof," and in that way, the results can serve to create a reality for the family that urges them to clarify their doubts and frustrations about drug use patterns. We use the evidence of positive urinalysis to raise intensity in families toward prompting family action:

Th: Let me show it to you. This is from his last urine sample.

Mother (M): What's this?

Th: "Cannabinoids," which is a fancy word for marijuana. So it was after the third session that you smoked.

Father (F): You know that really surprises me Randy. It really shows you didn't take any of this seriously. It is the truth though, because we did start on the ... we came the sixth.

M: When did we make our rules?

Th: The rules were implemented between the twentieth and the twenty-seventh, definitely before Randy smoked.

M: Guess what: You lose your truck.

F: I can't believe you did that Randy. I really can't believe that. What were you thinking about? Did you think we were just going through this thing as a big joke? When did we make the rules?

M: The Monday before graduation.

F: I don't think this is very fair to all of us.

M: Marijuana cigarettes meant more to you than having the truck?

Randy: No.

M: Then what did you smoke for?

Randy: (shrugs his shoulders)



M: Well what did you think? This was a big joke us coming here every Monday, working out these rules, the whole family being involved and caring so much about you, that you could just screw it up? Don't you care about yourself? (tears from Randy). What did you care about? You obviously didn't care about losing the truck — you've lost it!

F: You've really put us to the test Randy.

M: We'll sell the truck.

F: We talked about this. And you knew you were going to have your urine checked.

M: I tell you what it is, Randy doesn't think we'll stick to it.

We do not make a practice of reminding families when an adolescent will have his/her urine checked. If we did, some adolescents could and would plan their drug-taking accordingly. In this case we told them several weeks prior to the date of the urine check that it would be done sometime in the next few weeks. This was done to inform the family that a successful outcome of treatment required at least one negative urinalysis.

### *Step 3. Home Detoxification*

Detoxification is a term to describe the medical protocol for ridding the human body of a drug substance when the person independently has failed or not attempted such an action. We refer to "home detoxification" as an intervention in which parents arrange to monitor an adolescent's behavior in a similar manner as an institution would. Unlike working with heroin addicts in a home detox context (Stanton et al., 1982), ours is *not* an attempt to help a person rid the body of drug substances that have become addictive elements. Young persons physically dependent on drugs or alcohol are likely to require medical supervision.

In common with the Stanton and Todd model (Stanton et al., 1982, page 136), however, is a strategy to raise the intensity of the problem if previous attempts have failed, and to compel the parents into further and more drastic action. The treatment session consists of negotiating the urgency of this task with the parents and working out the actual arrangements in which the parents would agree to closely monitor the adolescent. Depending on the severity of the problem behavior, this might be done on a weekend or longer, such as an entire week.

In one case with a family it was apparent that earlier parental attempts to curb and eliminate drug behavior had not succeeded. The parents were considering institutionalization of their adolescent for the second time in recent weeks. His drug pattern had shown a continued use of marijuana several times per week.

Th: That's absolute, he needs a controlled atmosphere because he can't be depended on to cut this out on his own. The problem is they want twenty grand (an amount which this treatment center would demand of the family) to do it, or something like that, and do you have any insurance to cover it?

M: No, we have 50% but they want \$13,000 down in cash on our part. My father had it, but he couldn't see me paying it and didn't want me to.

Th: That's a lot of years of work for two people. I'm sure you are working hard for that money. Just think how many years you'd have to work to cover that.

M: Uhm, hmm. That's true, we knew that.

Th: We agree with the idea of a confined area, he needs some restrictions, some severe restrictions, because he is using some dangerous drugs and he's using a lot of them, and it has been our experience that what they tell you they're using is about a third of what they are actually doing. So chances are he's not telling us the straight line, I don't want to call him a liar, but that's been our experience.

M: Well, that's been our experience too.

Th: Okay, we agree on that, his behavior has been unmanageable, but can you give that confined atmosphere.

Stepfather (Sf): We're doing that.

Th: Yes, I sense that, we think you're handling this very well. It's not going to be easy, that's why I wanted to see the two of you *alone*, I wanted to see how committed the two of you are first to getting this kid straight. Because it is going to take some effort. Both of you work?

M: Yeah.

Th: Ok, but he needs to be detoxified. He needs to be straight for at least a week before we can go further.

M: He has been for a week because he was in the treatment center.

Sf: We gave him three choices when he came out of the hospital; come back to this family, or go to



your biological father, or you go to granny and papa.

Th: Where do you want him?

Both parents (in unison): We want him here.

Th: OK, then there is no choice. He's in your family and you need to do it. You can detoxify him in your own home (no physiological addiction was detected), or you can pay them (treatment center) more of your hard-earned money to detoxify him in a little room like this, and when he walks out of there it's going to be totally changed. I mean, you can detoxify a monkey in a room like this, but as soon as he's out you have no control again (a repeat of the last scenario).

M: OK, that's what we're willing to try.

Sf: That's what we're here for.

Th: That's why I need to talk to you, to see if you are willing to do that, to see if you're that committed to getting him off drugs.

Sf: Oh yeah.

M: We've already bolted his window down ...

Th: Great.

M: ...and the screen...

Th: Good.

M: ...and we're planning on buying inside padlocks...

Sf: ...and lock the doors on the inside. And we're the only ones who will have the keys to them.

M: He'll be able to go ahead and get out some of the other windows in the house, but ...

Th: Are you saying nobody's going to be home, you're just going to lock him up?

M: No, no, no, we're just saying at night when we're trying to sleep.

Th: Oh, OK.

M: We told him to be home and he will not be out of the vision of an adult for more than three to five minutes. The house sitter checked him today.

Some caveats are in order here. The timing and implementation of this maneuver must be carefully assessed. It is the responsibility of the therapist to judge the appropriateness of the intervention. Indications for its utilization include: (1) the parents must hold a conviction that they can do it, even if slight doubts do exist, (2) the severity of drug abuse must not be so great as to be likely to lead to destruction of property in the home, and (3) if there is no reasonable doubt regarding the safety of the adolescent or parents to physically challenge each other. Contraindications include: (1) potential

physical threats which would likely lead to violence, (2) parental responsibilities such as work which would interfere with being available for the home detoxification, and (3) an uncertain or inaccurate diagnosis pertaining to physiological addiction.

Home detoxification, unlike many institutional detoxification programs, provides the opportunity for changes in family functioning. Since inpatient treatment settings may be less concerned with family structural or interactional patterns around drug abuse as well as financial stability of the family, and more concerned about the physical well-being of the adolescent and the attainment of detoxification, some adolescents return from an institution after a successful or unsuccessful experience with detoxification to a family context which may very well organize them to experience the temptation to return to abusing drugs. This phenomenon is analogous to the institutional care of psychotic patients who show signs of recovery until they return home to environments which organize them to remain psychotic (Henry, 1971).

#### *Step 4. The Bogeyman Cometh*

This conceptualization and corresponding intervention is utilized in response to a parental coalition which is found in therapy to be insufficient or inoperable for attaining drug-free behavior of the adolescent. The rationale for the use of this more dramatic action is placed within the framework of "the bogeyman cometh" (O'Connor & Hoorwitz, 1984), a term used to describe the powerful force in the universe which will "stamp out" someone who engages in destructive behavior. Crafting such conceptions of a "bogeyman waiting in the shadows" alters the predictable therapist and family responses to continued or stepped-up drug abuse. Instead of laying out increasingly restrictive placements, rules, and consequences to the adolescent, sometimes a "more of the same solution" (Watzlawick, Weakland, & Fisch, 1974) which has organized the adolescent to defend and counterattack in the same way, this somewhat mythical, yet real, force is "outside the circle that presses them" (O'Connor & Hoorwitz, 1984, page 239). Rather than an escalated combat between adolescent and family, the "bogeyman experience affects the system of interactions in a way that interrupts dysfunctional, degenerative loops and allows for more functional, complementary interactions" (O'Connor &

Hoorwitz, 1984, page 242). Since the bogeyman is outside the therapeutic environment, the bogeyman can touch the adolescent but the adolescent cannot touch the bogeyman.

The “bogeyman cometh” intervention was employed in the third session with a family when it was discovered that Frank (age 15) was continuing to smoke marijuana, had a positive urinalysis, was truant from school, and appeared lethargic and incoherent in the session. Mother was inconsistent with implementing the consequences for drug behavior and father was indiscriminately tyrannical in dealing with Frank. After the parents were seen alone to discuss this newly proposed strategy, Frank was brought into the session. Mother was urged to go first since she was more soft-spoken and ambivalent about drug behavior:

Mom (M): Are you going to skip school anymore? (Frank shrugs his shoulders). Just whenever the mood strikes you? Well I’m not going to put up with it anymore. The next time you skip school, you’ve skipped school three times that I know of, or that I find out you’re taking drugs — marijuana, whatever — you’re going to have to be put on probation (enter the “bogeyman”). Frank, do you know what that means? (Frank nods his head). What does it mean? (Frank gives no response). You don’t know? You have to come home every night at 9:00 - on Friday and Saturday nights too. You can’t run around with anyone else who’s on drugs, like your cousin.

Th: If he violates that, he doesn’t do what the probation officer says, what happens?

M: You can get put in jail. You have to see the probation officer every week. Then if you do it again (break the law by violating probation such as skipping school), then you get put in jail (actually juvenile detention or “lock-up” in this county). And, I don’t want to see that. I don’t want you on probation, but I don’t want to see you skipping school either. But we have to do something, we can’t let you keep doing what you like to do.

Th: You’re doing fine.

M (to son): Do you believe me? (son shrugs his shoulders in uncertainty). Do you think I’ll do it? (another shrug from son). I will. Because I love you and I don’t want to see you be a dummy. Just because you get mad at the teacher at school, you play hookey, that’s your excuse. That’s no

reason. Everybody can’t be against you...(digression from task).

Th (pulls parents back on task): You two (parents) are real clear on what the next step is? And whose responsibility it is?

Dad (D): It’s both of ours (referring to he and his wife).

Th: What’s his part (Frank), and what’s your part? Why don’t you explain that to him.

M: You go to school everyday and stay away from drugs. And if you don’t, then probation is the next step because our part is to make you the best we know how.

D (talking to the son): It’s going to be up to you.

M: That’s right.

D: Only up to you. I don’t want to see you do it, but if you make that choice, you’ve made your bed and you sleep in it — and that’s the way it’s going to be.

The plan by the parents circumscribing probation can only be relevant when the therapist and juvenile court system have discussed the viability of it and its implementation. An empty threat without such coordination will only weaken and usually negate such an intervention.

The intervention in Step 4, the bogeyman-cometh, is sometimes the final step in achieving drug-free behavior. However, in this case Frank was arrested for auto theft and further action was required. This is discussed in Step 5.

### *Step 5. Probation*

With more difficult cases it is sometimes necessary to utilize the juvenile court system. Usually, two additional conditions of probation are requested by the therapist of the courts: continued therapy and regular urine screens. The bogeyman cometh technique is not intended to coerce families into utilizing mechanisms of control such as probation, but the therapist and parents must be prepared to go “all the way” should the adolescent ignore or challenge the parents. Therefore, it is necessary for the therapist to be familiar with local or state laws pertaining to juvenile and/or adult detention. Again, this step should only be taken when less severe consequences have been ineffective. If home detoxification fails (e.g., the adolescent runs away, forcibly leaves the home, or is found using drugs when the parent(s) check up), the consequence for behavior is for the

parents to help precipitate the crisis by placing the adolescent on probation. An adolescent who reaches this point usually qualifies, and the parents have the evidence needed by the probation office for court referral.

We advocate that these adolescents continue to remain with their families if there is sufficient family acceptance. In a few communities there are family-oriented alternatives to pre-trial treatment and supervision (Lipsitt, Lelos, & Gibbs, 1985). Most communities do not have such an option, and while we have found some adolescents who have spent short periods of time in detention centers to have made constructive changes in drug and social behavior subsequently, we do not promote such an alternative nor attempt to persuade the legal community to do so. The predictors of success in utilizing such detention centers regarding drug-free behavior, family relationship changes, or social activity patterns have not been empirically established.

Working closely with extended community resources is essential for this approach to be therapeutically successful. The county probation department must be consulted regarding the criteria and conditions of probation so that the parents know what is required to place their son/daughter on probation. It is crucial that these steps be carefully planned. Any discrepancy between the therapist's information to the parents and the actual probation policies may lead to treatment failure because both the parents and the therapist will lose credibility with the adolescent should anticipated consequences for drug use not occur. Thus, the probation officer, attorney, director, and police officers should be consulted as well as the county court system. Prior consultation with such agencies also allows the family and therapist an opportunity to develop a working alliance and sense of confidence in these agencies.

Criteria the parents may use to provide evidence to place the adolescent on probation can include theft, vandalism, running away, a series of trancies from school, being caught possessing or using illegal drugs, or staying out beyond curfew. Courts and school officials can be extremely helpful in cooperating in these endeavors. Police and school officers can help parents document these harmful or destructive adolescent behaviors as evidence. This

can be particularly helpful since each court system will have its own procedures and interpretation of these "facts."

In a continuation of the previous clinical example in Step 4, of 15 year old Frank and his parents, the following events occurred later in treatment.

Frank was arrested later for auto theft along with two other juveniles, travelling 150 miles before being caught. Frank's father drove to get all three boys to return them to their hometown. Frank was consequently placed on 12 month probation which included many conditions, including one in which he pass all his classes in school or be placed in the juvenile detention center. The parents were well prepared for this event and played an instrumental role in delineating Frank's probation sentence. The boy's urinalysis 4 weeks after his court hearing was negative, the first such result since therapy had begun. The family is intact, the parents are helping monitor their son's probation as well as his activities and friends, with no further difficulties with the law. In effect, the probation officer, the juvenile detention center, and the courts and schools were included in this treatment. While they did not participate in the therapy itself, their presence was felt and the use of their roles served as the "bogeyman" which raised the stakes for any further drug abuse. Their actual participation in treatment is an option for the therapist.

Again, it is important that these steps which include outside agencies be carried out by the parents, thus supporting their hierarchical position in the family. From this point forward the adolescent is subject to the conditions of probation determined by the court and monitored by the parents. Any violations of the conditions of probation must be reported by the parents. If probation is the necessary next step (given that lesser consequences and the home detoxification prove ineffective), the therapy must be organized in such a way that this consequence is the result of the adolescent's own choosing subsequent to forewarning. The parents must also be convinced that they are being responsible, effective, and influential, and not traitors who have turned against their child. This is crucial for contextualizing the upcoming stage of treatment when other problems require family teamwork, and developmental issues become relevant.



It is also important (at the *beginning* of therapy) to establish the family's referring source, including any other therapeutic or legal connections the family or adolescent may have. For example, many adolescents are already on probation at the time they present for treatment. If the parents view probation and its consequences as "out of their hands," the intensity in the family is not likely to be high, resulting in little likelihood of change. If this is the case, the therapist must be prepared to challenge the

parents' "hands-off" role in the management of their adolescent's behavior. Overall, drug abuse is embedded in a complex ecology and change involves intervention at a number of levels that include individual, family, and community (Joanning, Gawinski, Morris, & Quinn, 1986). A therapist must develop a comprehension of these levels to coordinate the implementation of a series of strategies.

## 2.0 COUNTERING ADOLESCENT SABOTAGE

Since a parental coalition and push toward action are facets of treatment, a prolonged therapist-adolescent alignment is undesirable since it would neutralize parental attempts toward competence. Thus, the therapist must strike a balance, both joining with the adolescent in confirming or accepting responses on the one hand, while permitting, even encouraging, parental influence upon the adolescent's drug behavior on the other. If the therapist chooses to side with an adolescent, the parental unit is weakened and the adolescent may accept a "one-down" position in which the therapist represents the young person's case to the parents. This encourages adolescent dependency and the battle lines drawn with the therapist on the opposite side of the parents.

Timing is crucial, in that a therapist must first align with one subsystem (the parents) to prompt constructive action around drug abuse, and subsequently align with another subsystem (adolescent, sibling, and peer group) to promote negotiation among generations and autonomy (Minuchin & Fishman, 1981). However, this pattern is not as predictable as outlined here. That is, support for the adolescent may need to occur concurrently with parental support throughout a therapeutic session. Therapist alignment with an adolescent may be a prerequisite to any further work since losing an adolescent by running out or failing to return will interrupt and threaten therapeutic progress.

Th: (to parents) I think she is stringing you along.  
 Brenda (B) (16 year old female drug abuser): Oh, thanks a lot (sarcastically to therapist). We really need this kind of help. I'm serious.  
 Father (F) (to therapist): In what way do you think that?

Th: I don't know. We better be careful, she's getting mad and we might lose her (making legitimate a motivation of the rebellious daughter here may mean less of a need for the daughter to actually leave to convey that very message).

B: You're doing a pretty good job.

Th (to parents): What is it going to take for you two to keep her here? Because this is really important, I mean, here we are talking about some serious stuff and she gets reactive to it, and you're afraid she's probably not going to come back, or take off, or something like that. Right? No?

B: Probably, she already has.

Mother (M) (laughing): Jim (14 year old sibling) maybe, not Brenda.

Th: But all of your reasoning and negotiation and explanations about why you're doing what you're doing isn't working.

B: He wants you all to be tougher on us by hurting us more.

Th: I think she's stringing you along. I think she's the one at the switchboard (temporarily risking B's anger toward the therapist).

M: What do you mean "stringing us along?"

Th: I think she's got *her* finger on *your* pulse, and she knows exactly what gets you uptight, what gets you upset, how to love you so that you'll feel better about her, how to act out so that you'll respond to her. You laugh at her. Jim talks about his poor grades and I saw a little smile over there. You probably didn't even know it, but he picks up those messages, and Brenda picks up those messages.

M: So what's the answer?

Th: I think you two have to talk about that.

Session two was held after the therapist held a consultation with colleagues.



Th: Well, a very helpful consultation back there. It didn't take me long to figure out where we need to go from here.

F: Good.

Th: Ah, the team and I sort of, the two people that you met before the session tonight, have somewhat of a disagreement about, umm, what's going to happen to Brenda at this point. You know, I really think that she's not necessarily going to shape-up right away. I mean, she claims that she is, and you really, you know, have gotten a lot more heavy handed about it in terms of telling her what the consequence are, but she doesn't get along with me very well, and as a result I'm wondering if she might just try to defy me and this whole deal about treatment by showing that we can't control what she does, and she might continue to experiment. That's a concern I have because, see, you can tell by her facial expression that she's angry, angry at me, angry at just being here, and so I am concerned that she might do that, that she might just go out and show by experimenting with marijuana even though you have set up some very good consequences. Now, the team thinks differently. Of course they haven't experienced this sort of tension that I have between Brenda and me. But they think it is possible that she might just do what she's agreed to do in terms of her telling you that she's going to behave, and she knows what the consequences are, and she knows what's right and what's wrong, and there won't be any more problems. So they're fairly confident. But I'm not, they tried to persuade me, but I'm not so sure, I really think that because of the tension here, that she's really pretty angry. She yells and screams coming in here, she yells and screams when you ask her to do anything, give a urine sample, fill out a form, Raymond (Brenda's boyfriend) can't come in, and particularly when you, in a sense, passively encourage it. Susan (mother), by paying atten-

tion to their antics, you smile and giggle a little bit along with them. So in a way it's kinda like a real three-some, Charles (father) is pretty serious about this and straightforward and wants to lick this thing. So I think they've got some more ammunition because they pull you over on their side.

B: I know she's not over on my side.

Mother: (giggles)

Th: See, see what I mean. It's just natural, I know, it's just a natural reaction at this point, because you've been doing it, and I know you tend to them and you enjoy their company.

B: I don't like that accusation. Just because I don't like you doesn't mean that I'll go out and smoke grass again. Because I may not like you but I love them.

At this critical time in treatment the urge to leave therapy, which would risk a successful outcome, has lessened because the adolescent has experienced a context to express her anger and frustration about treatment, the therapist, and the parents. This was not done by the therapist saying "tell us why you are so angry and uncooperative." This latter maneuver sets up the adolescent to retreat to silence and inaction. Adolescent silence is an uncooperative act which attempts to sabotage treatment and sidestep the intensity of the drug problem. Thus, an appropriate therapist action is to probe the family and arouse members' emotional systems, thereby prompting an adolescent participation.

In this case the concern of the adolescent threatening to leave the session and therapy was fed back into therapy in Session two. By predicting that the adolescent would continue (or return to) drug abuse to retaliate and "defeat" the therapist, the adolescent's motivation to use drug behavior as a rebellious act was diluted and its meaning rendered impotent.

### 3.0 CONCLUSION

From the lens of a systemic focus, contextual changes, such as interactional modifications and new information, create individual and interpersonal changes. Significant restructuring of family patterns will allow for the discarding of no longer useful symptoms: in this case, drug abuse. Since families with drug abusers are likely to be mobilized to exert

short-term change toward the elimination of such behavior, the approach proposed in this paper is salient because it (1) is symptom-focused, (2) emphasizes the present in its exploration of interaction patterns and individual behaviors, and (3) is intended to be brief as the therapy creates an active-oriented therapeutic climate which under-

emphasizes cognition and interpretation (unless the maintenance of the therapeutic alliance requires it) and emphasizes hierarchy, feedback, intensity of affect, interactional dances, and innovative behavior.

The risk in any therapeutic presentation is that the reader or listener will not recognize the contextual factors which influence any therapist conceptualization or action. None of the vignettes described in this paper can be replicated because each family has its own unique history, language symbols, and social experiences. Instead, these interventions must be embedded in a congruent therapeutic map. The danger in presenting any vignette is to inadequately strip it from the context of the therapeutic situation, from previous therapeutic experiences, and by ignoring other sets of relevant information. As we stated in the Introduction, therapy is a series of therapist responses to family responses to the therapist. Thus, consideration of timing and language systems must be included in any therapeutic plan of action.

Finally, we remind the reader that these interventions are appropriate for adolescents and families in which drug behavior is evident, though an addiction is not present which would interfere with family treatment. However, since family treatment of this kind could be implemented in an inpatient setting, some of the interventions described (such as parental unity and action, adolescent sabotage, follow-up home detoxification) could be appropriate. The interventions discussed essentially address the goal of drug-free behavior and therefore are relevant for inpatient as well as outpatient treatment. In another paper we broaden our view of treatment to include leaving home issues for adolescents, marital conflict, peer group development and reconstruction, and issues of identity and autonomy (Quinn et al.). Without these considerations, family systems treatment is simplistic and short-sighted. These family issues, though often implicit, actually weave throughout this first stage of treatment.

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